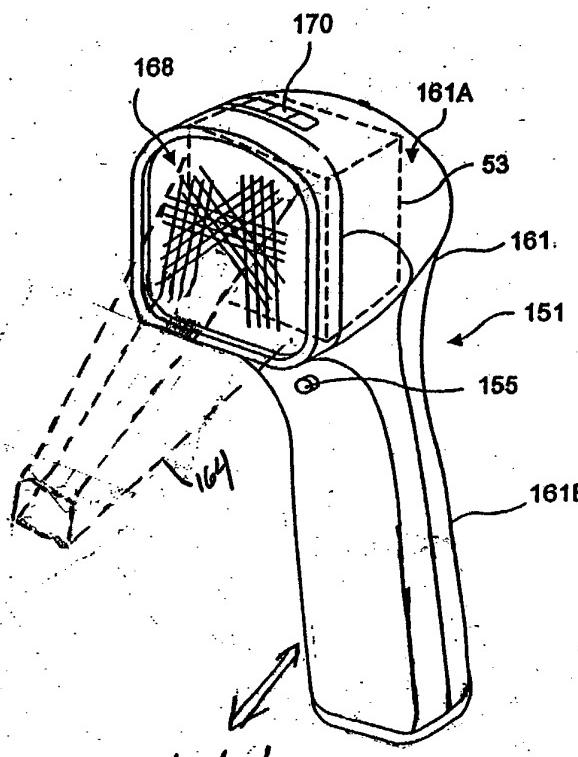


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First Generalized
Embodiment

FIG. 1A

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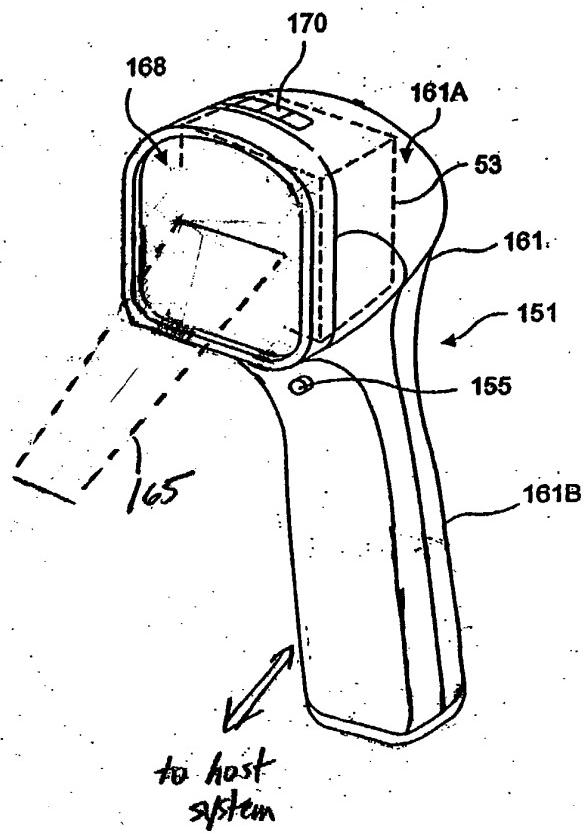


FIG. 1B

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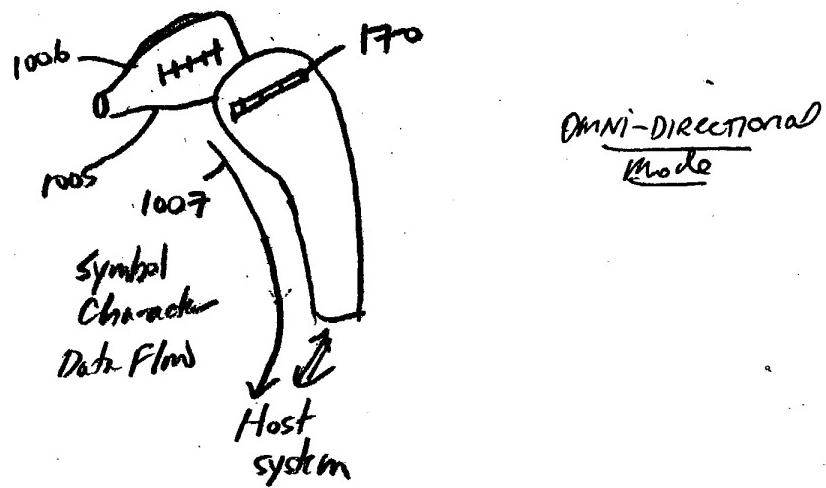


FIG. 2A

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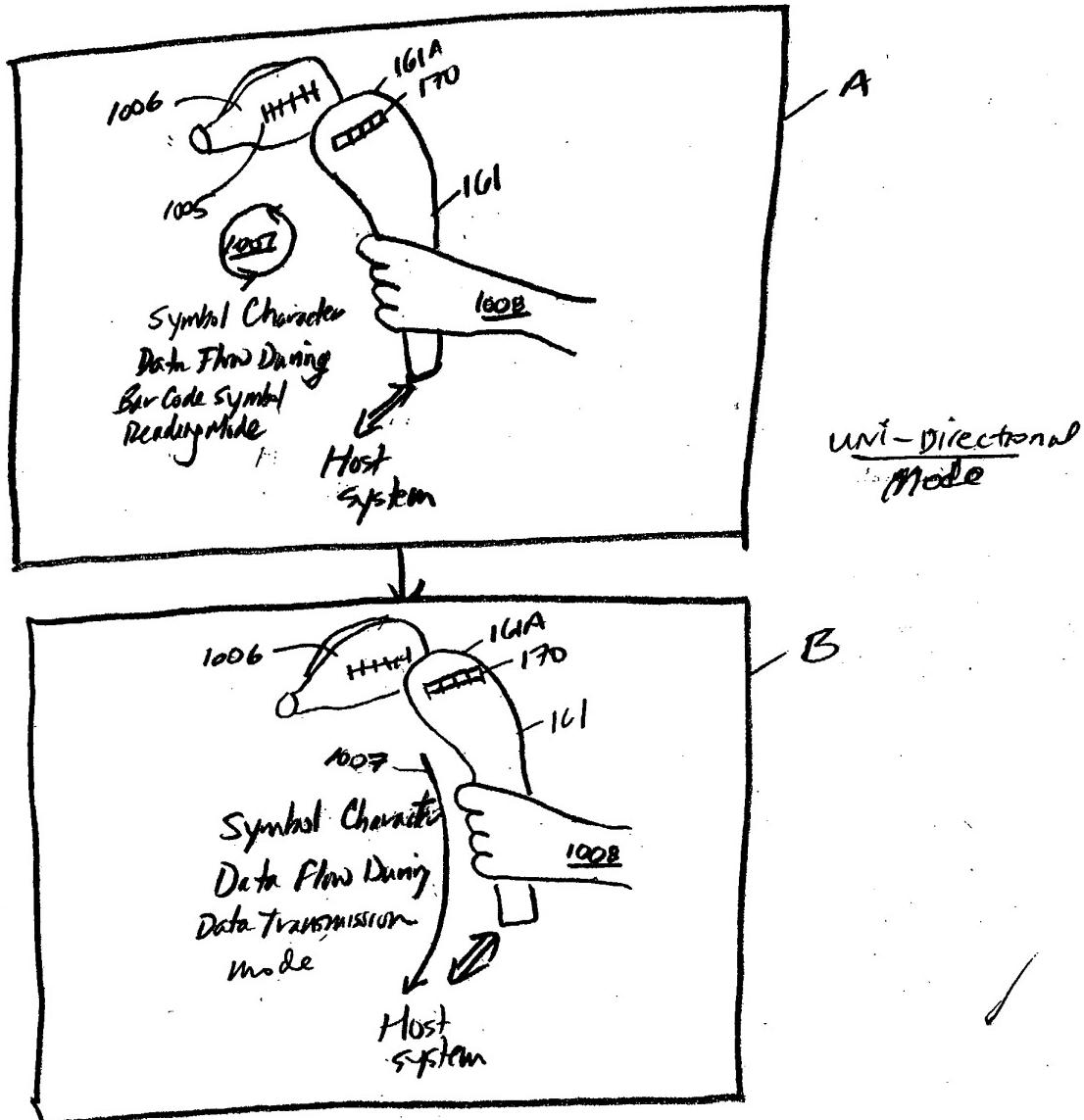


FIG. 2B

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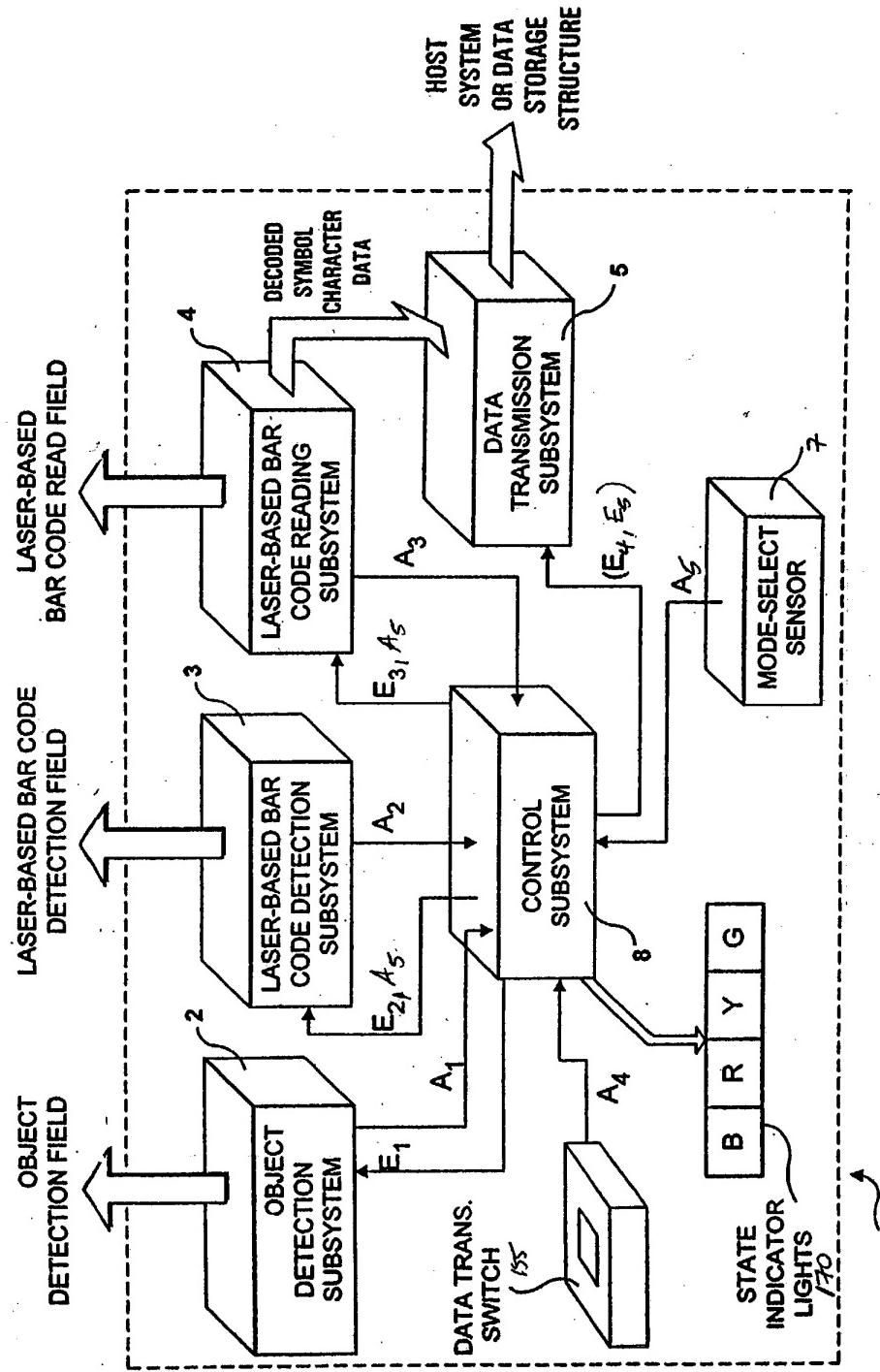


FIG. 3

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- 35. CENTRAL
LONGITUDINAL
REFERENCE AXIS

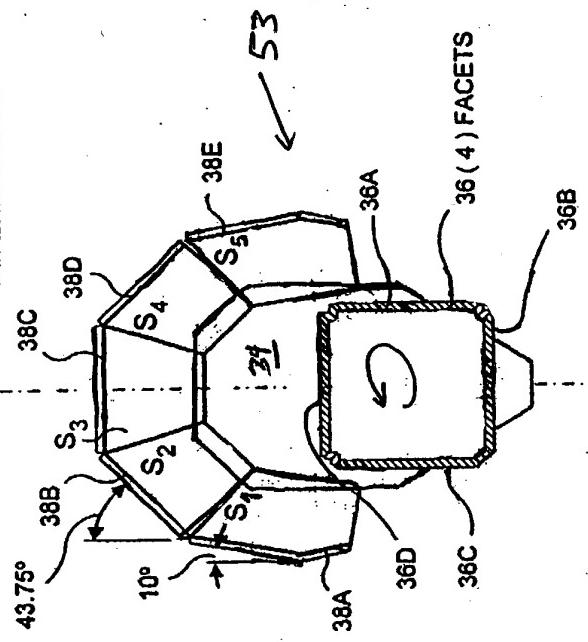
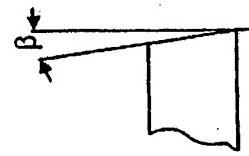


FIG. 4A

$$\begin{aligned}\beta_1 &= 690^\circ \\ \beta_2 &= 990^\circ \\ \beta_3 &= 730^\circ \\ \beta_4 &= 1030^\circ\end{aligned}$$

FIG. 5A



36 (4) FACETS

	TWIST α	BEND θ
S ₁₋₅	10°	46.0°
S ₂₋₄	43.75°	42.5°
S ₃	90°	40.5°

FIG. 5B

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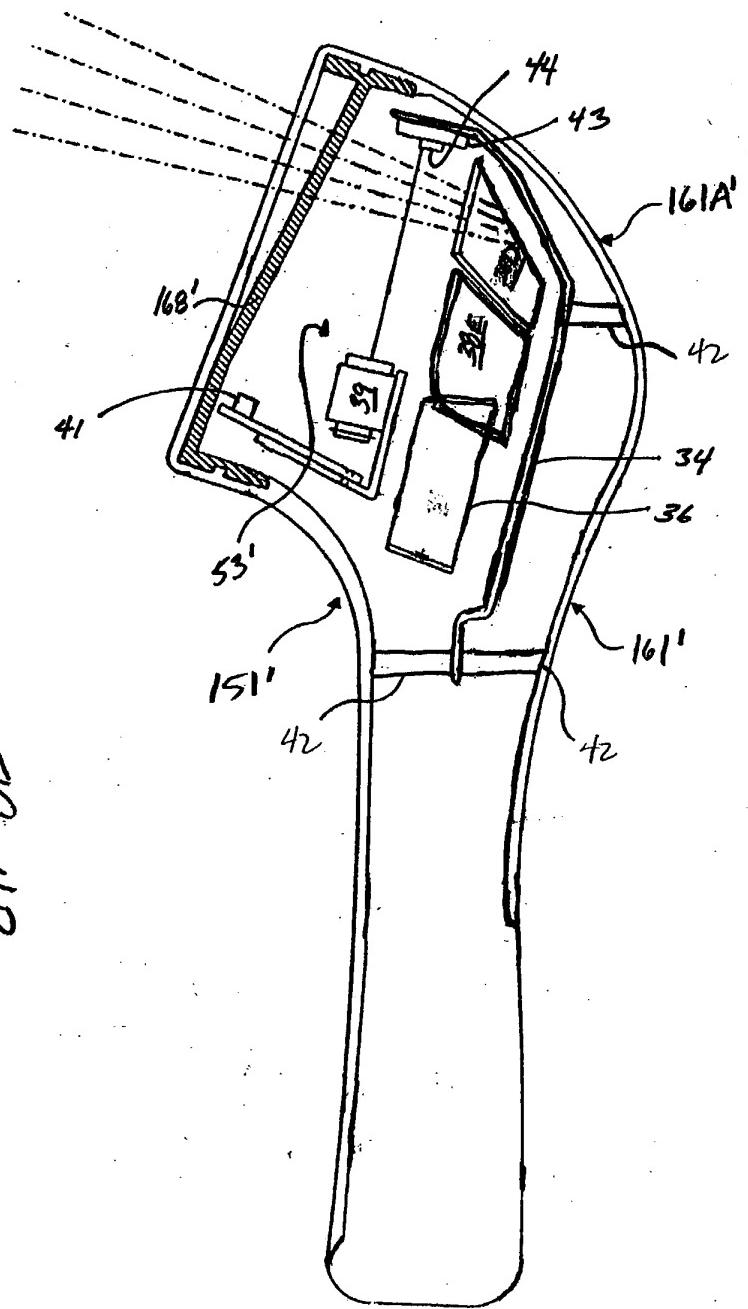


FIG. 4B

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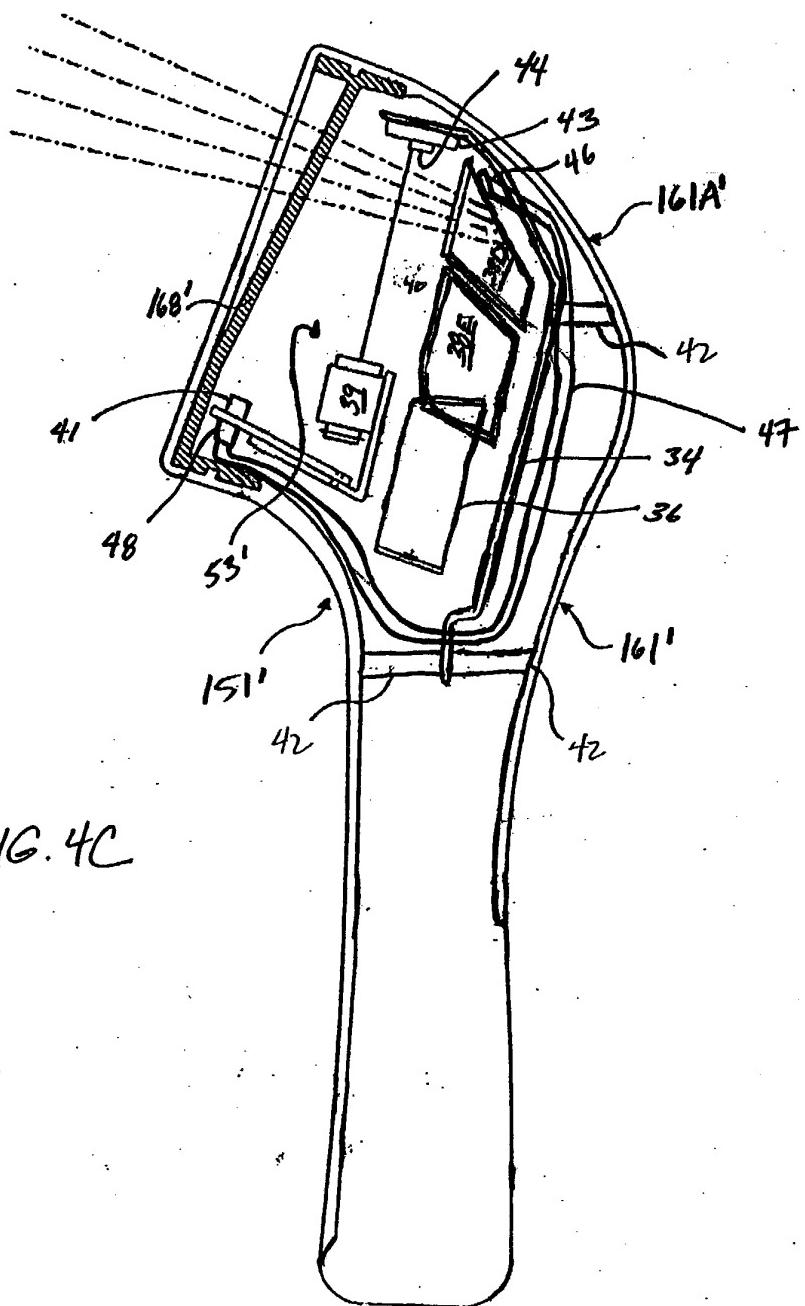


FIG. 4C

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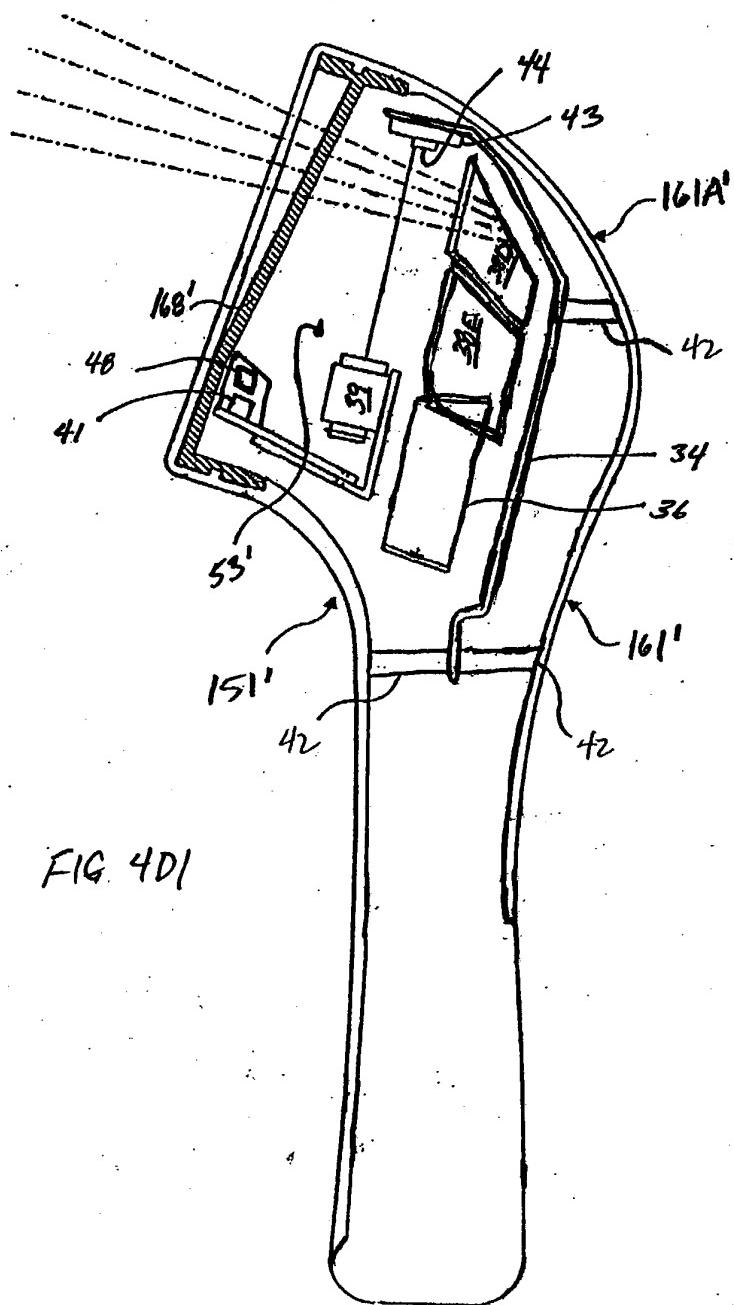


FIG. 4D1

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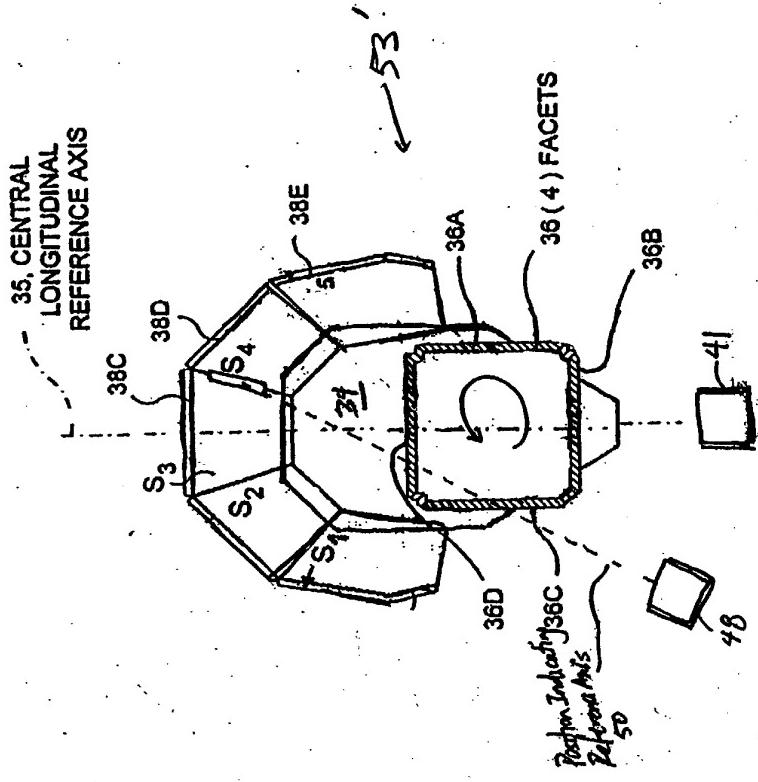


FIG. 4D2

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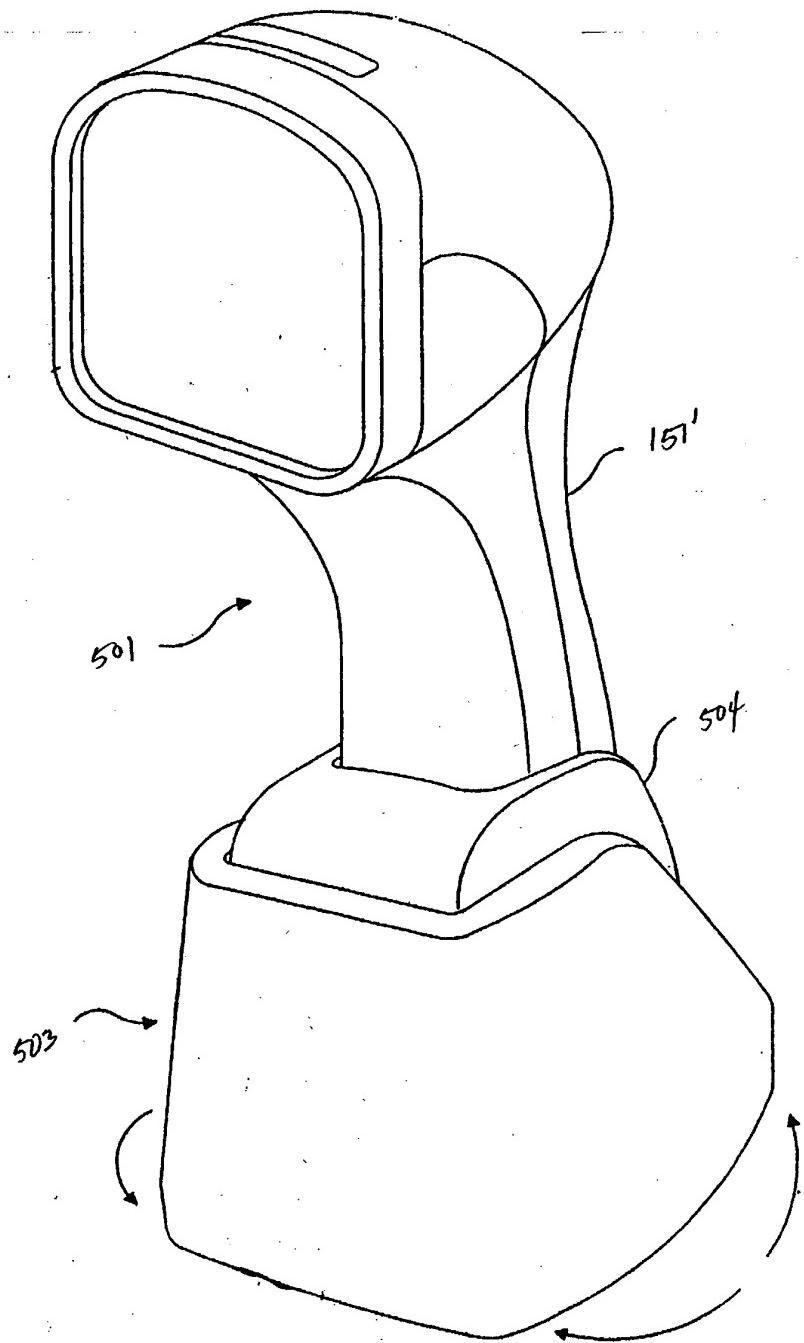


FIG. 5A

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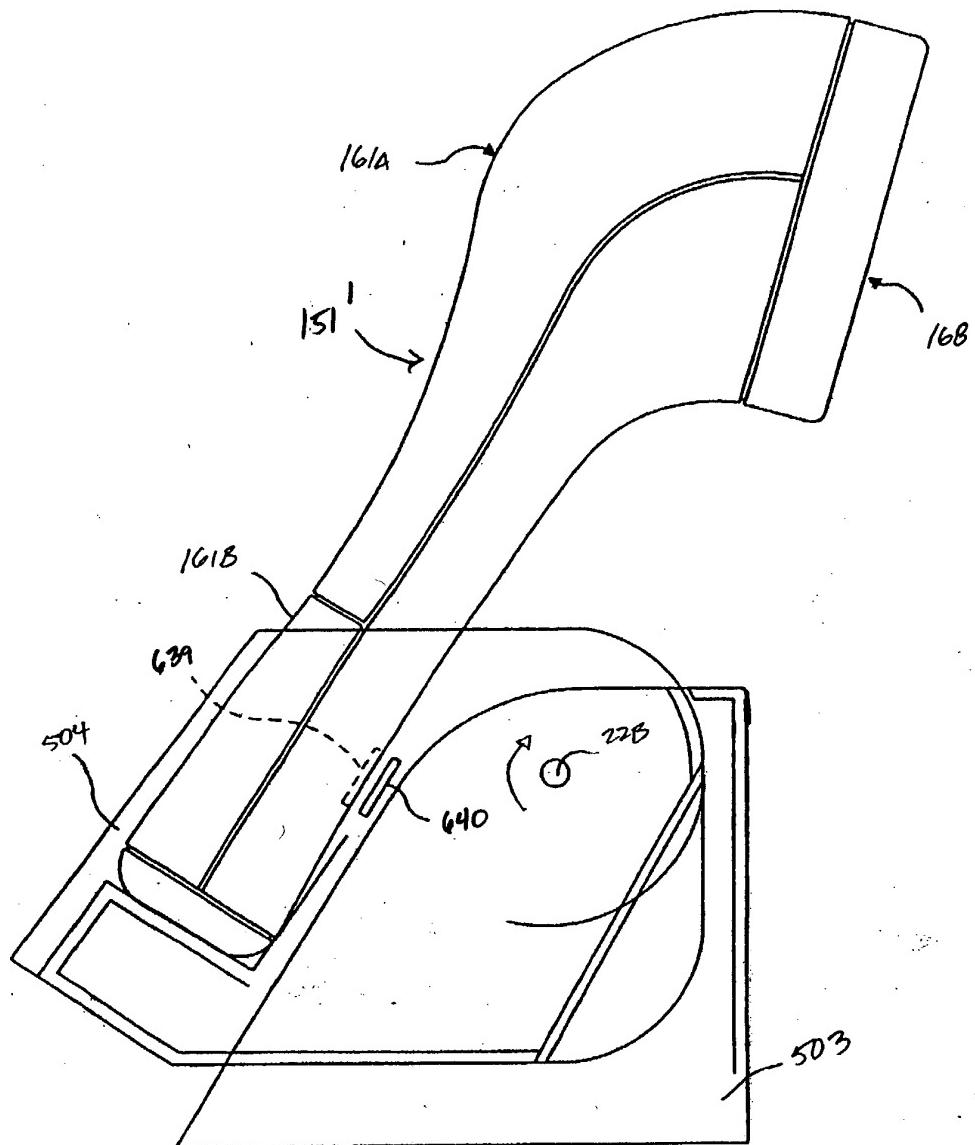
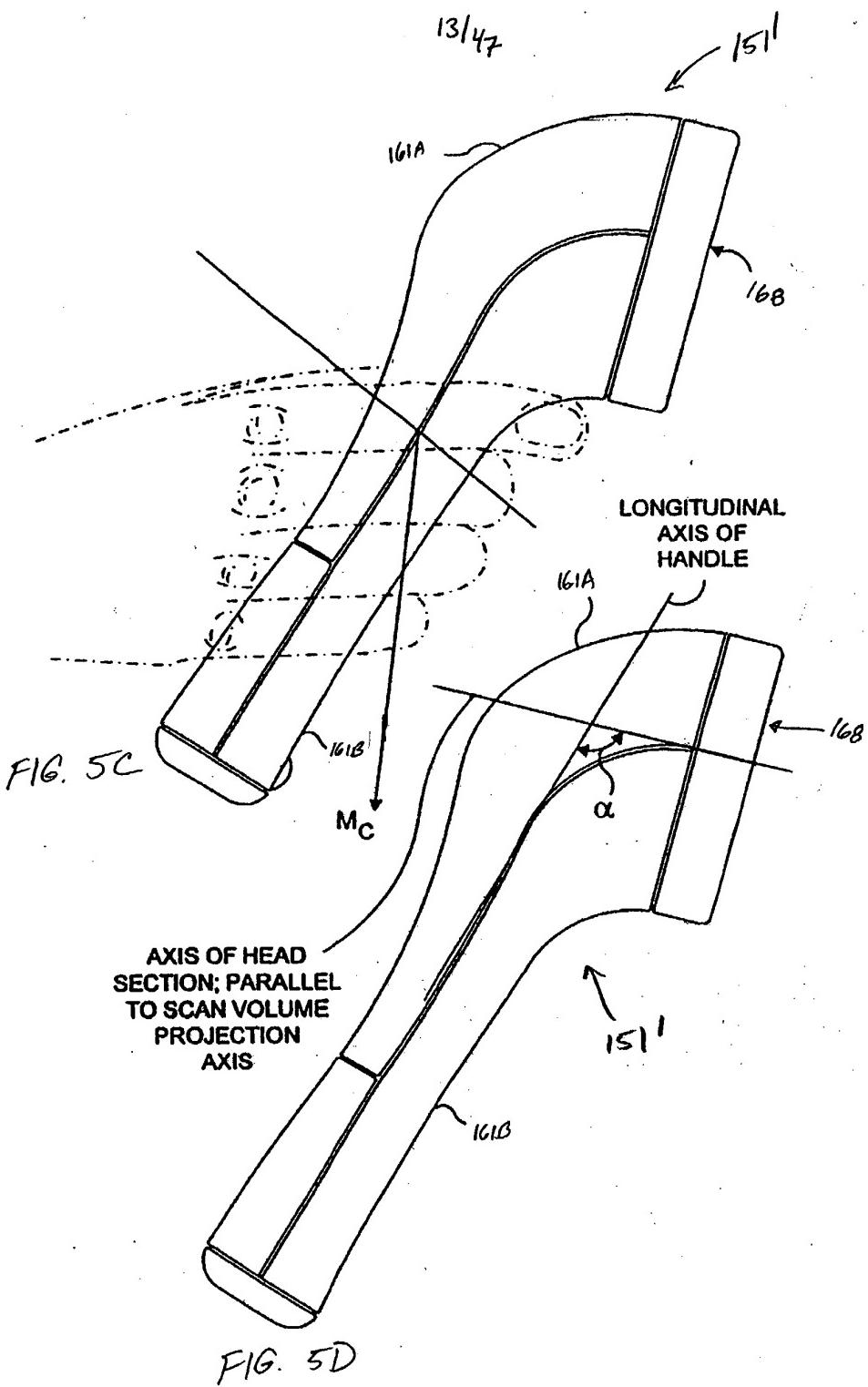


FIG. 5B



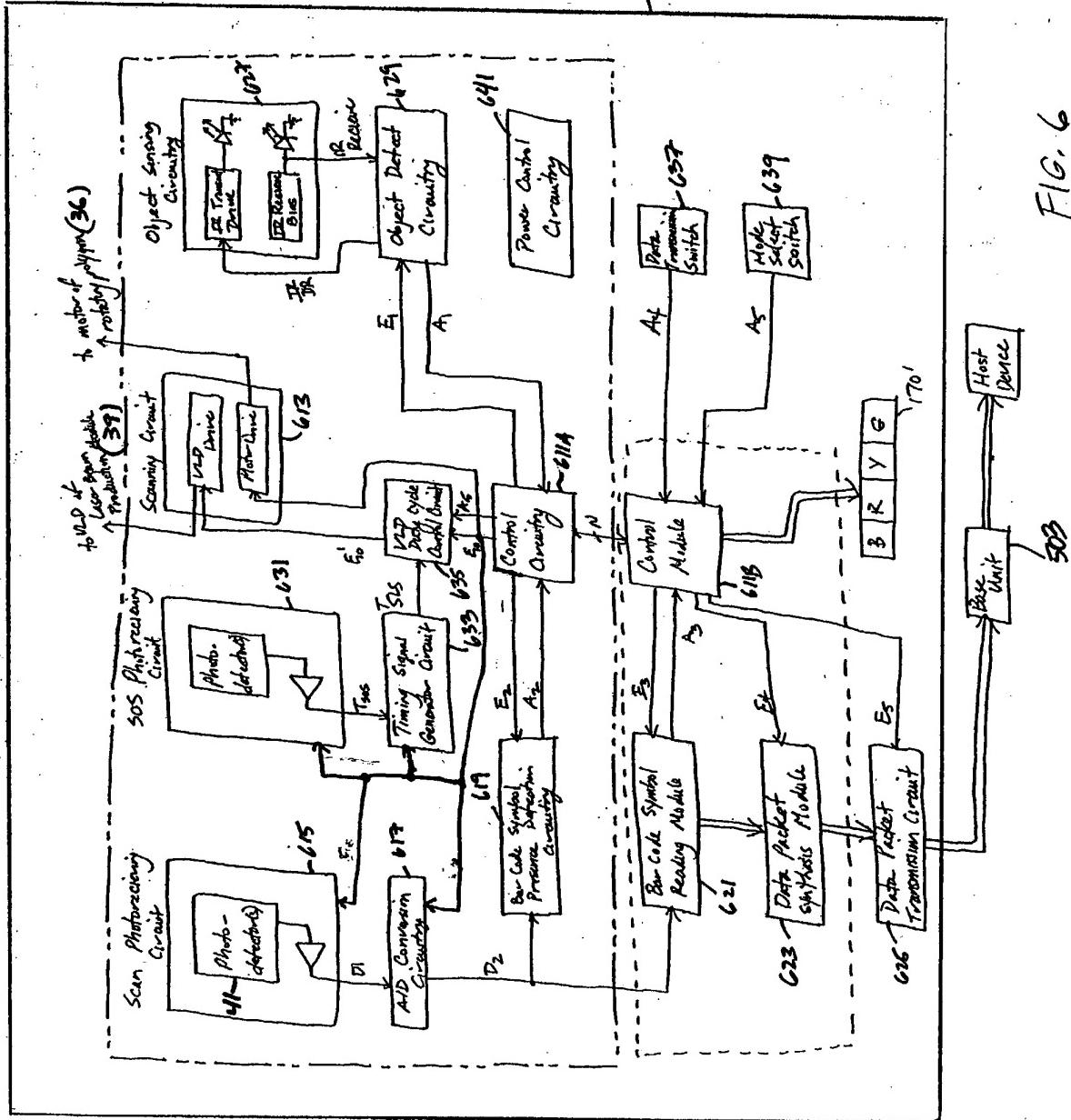


FIG. 6

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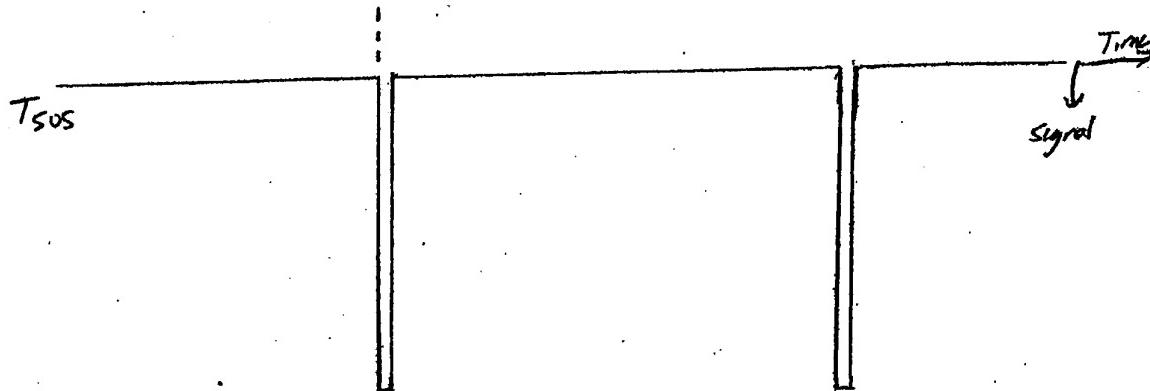


FIG. 7A

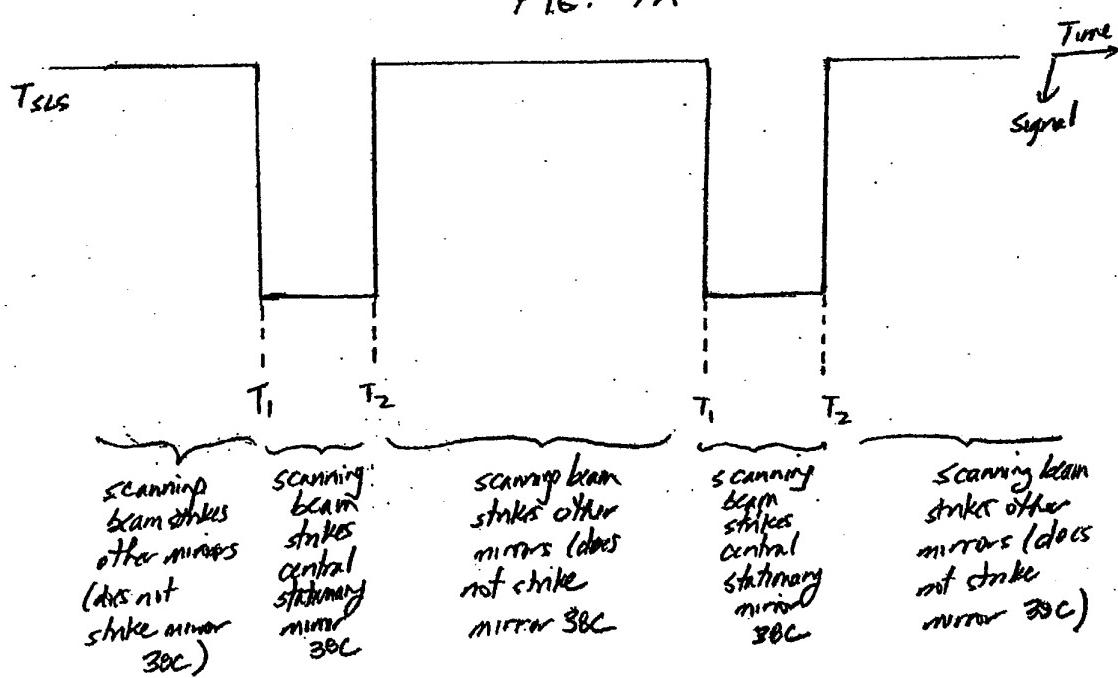


FIG. 7B

$$E_{10}' = (\bar{T}_{SLS} \cdot E_{10} \cdot A_5) + (E_{10} \cdot \bar{A}_5)$$

FIG. 7C

16147

L 633

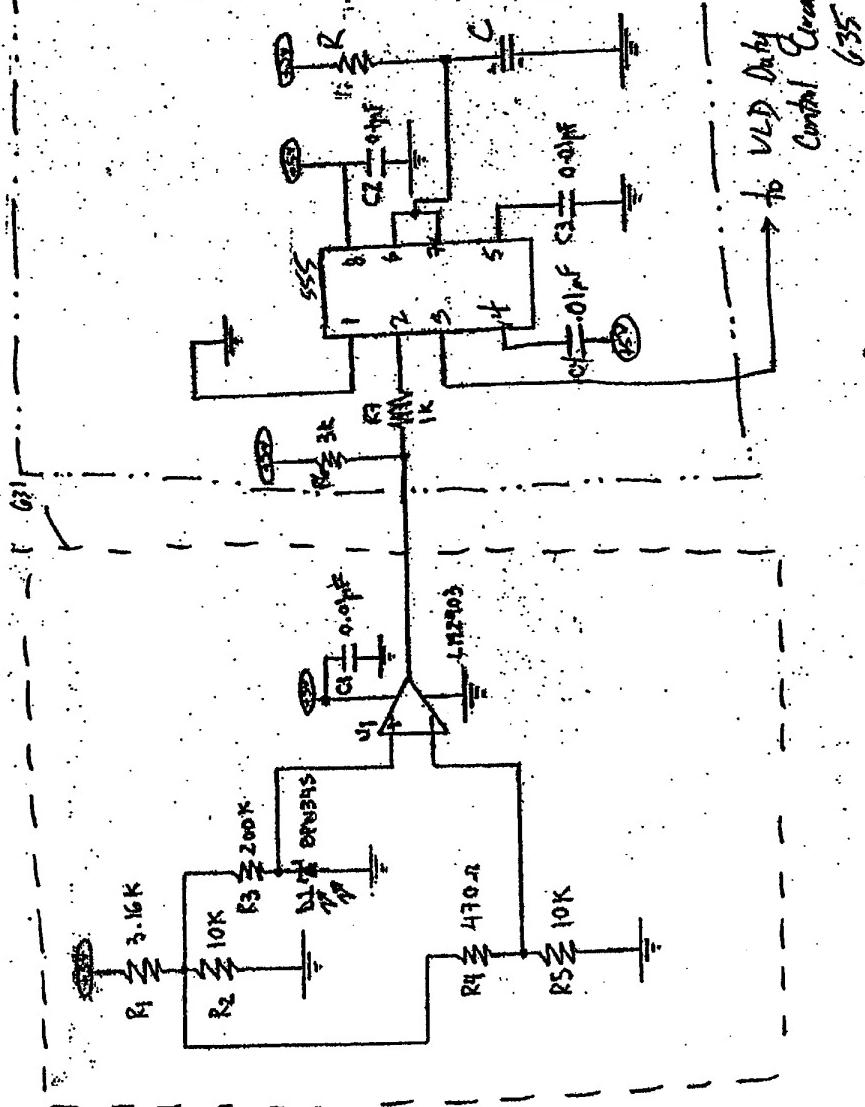


Fig. 7D

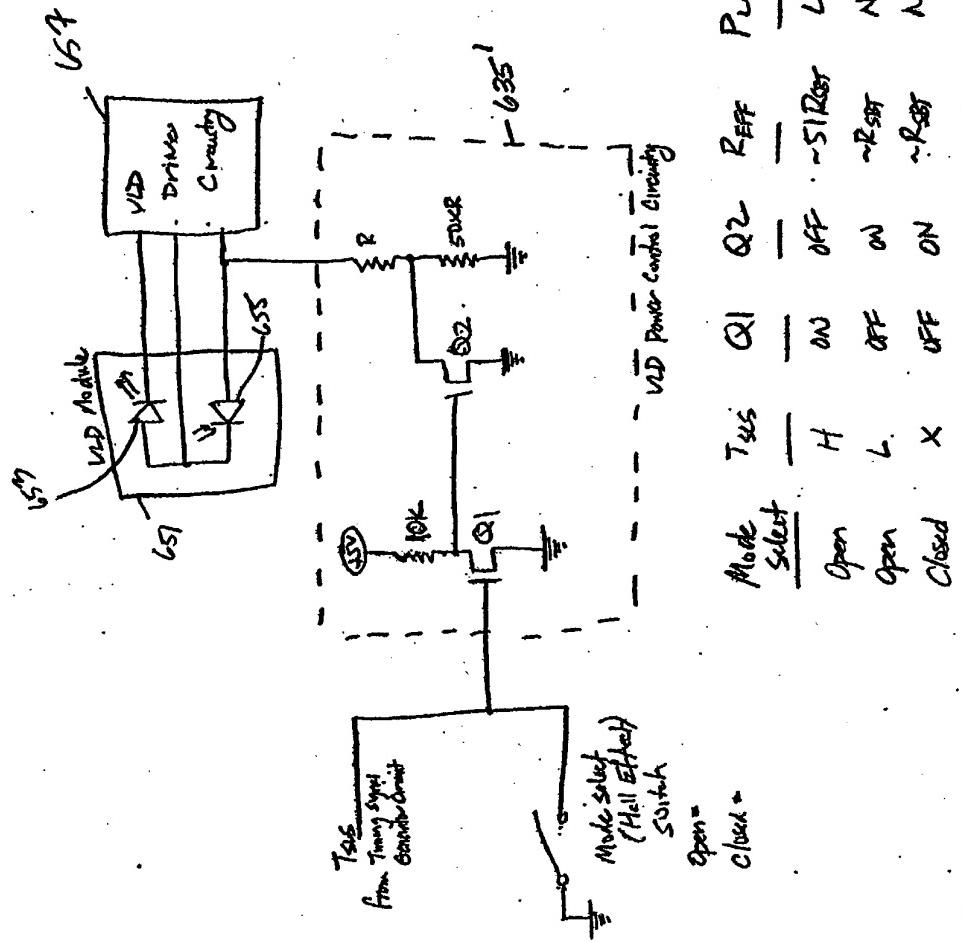


FIG. 7E

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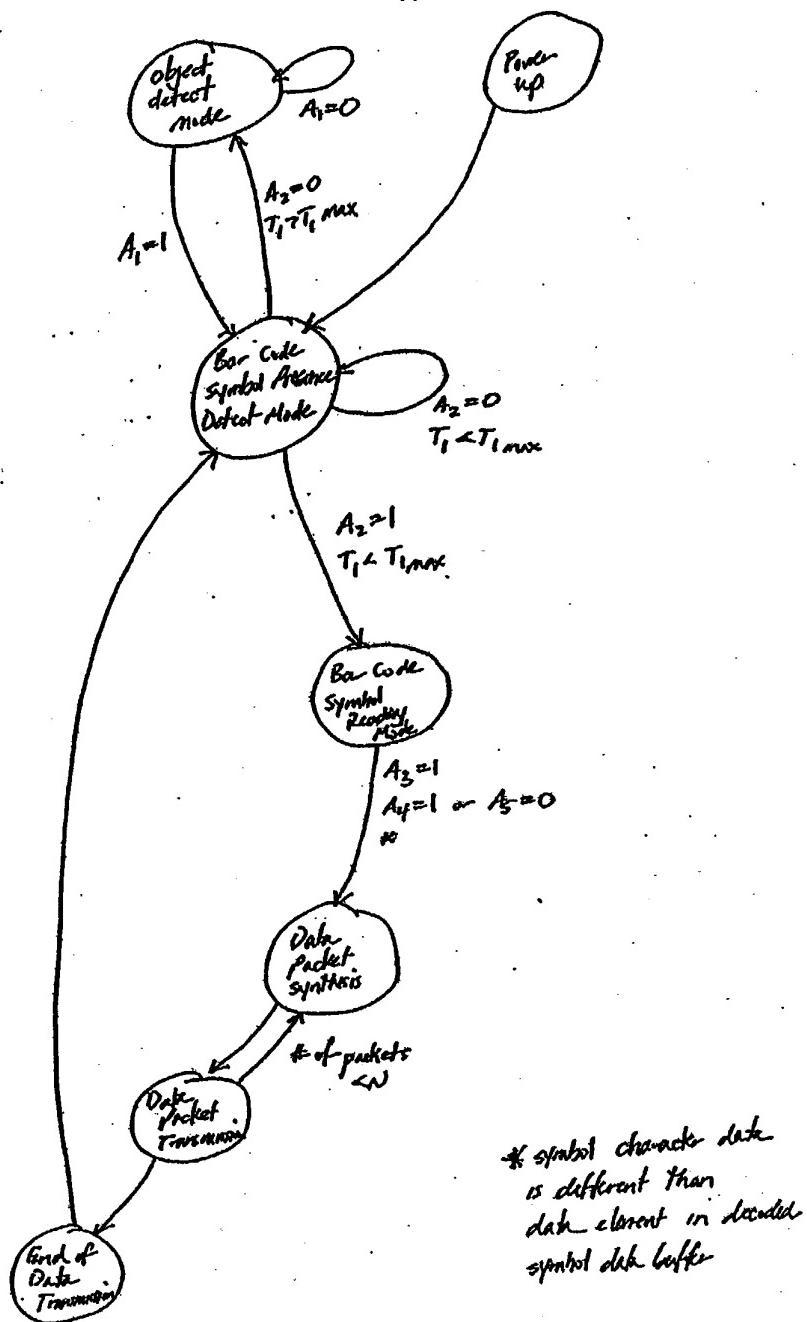


FIG. 8

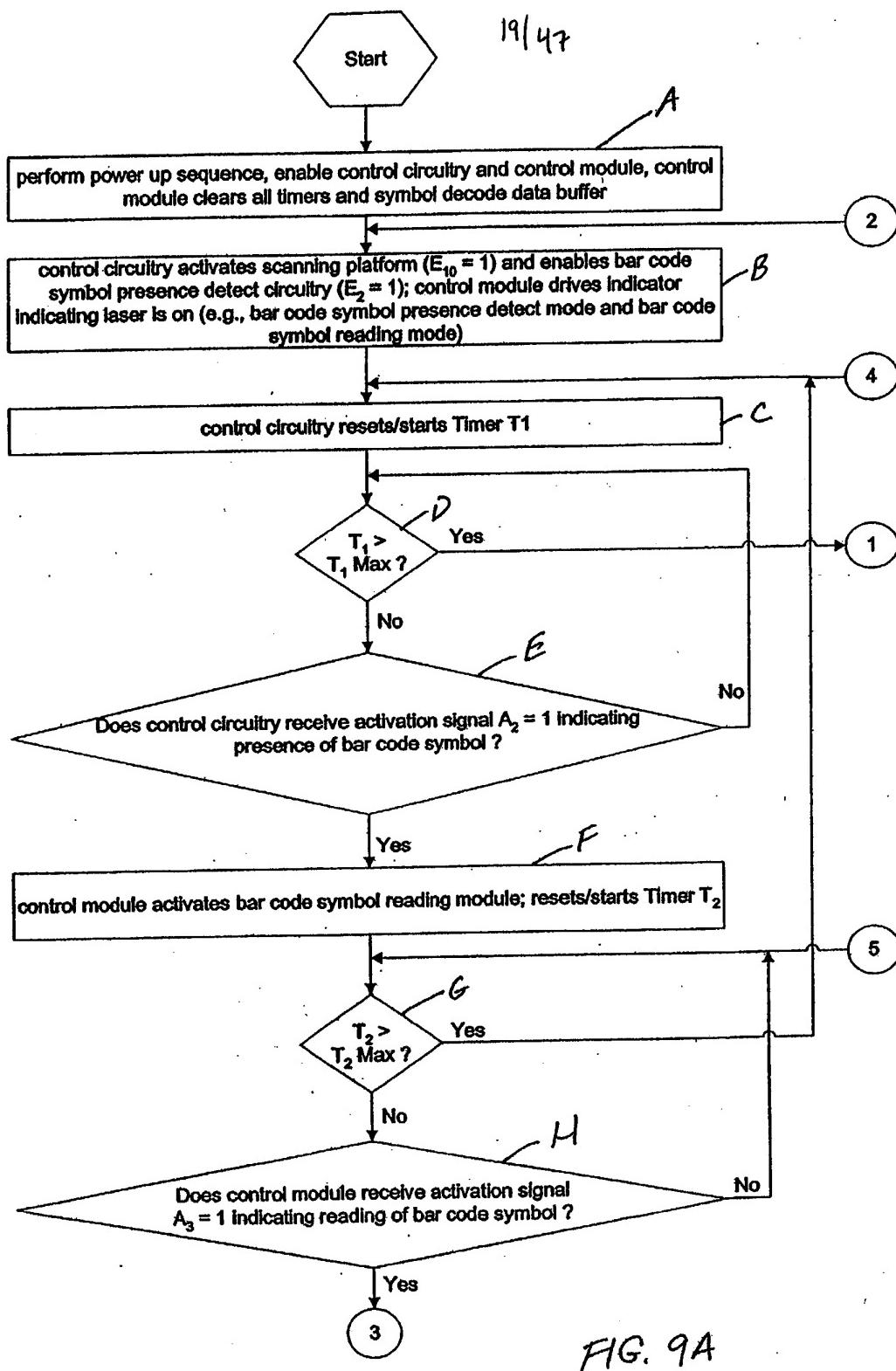


FIG. 9A

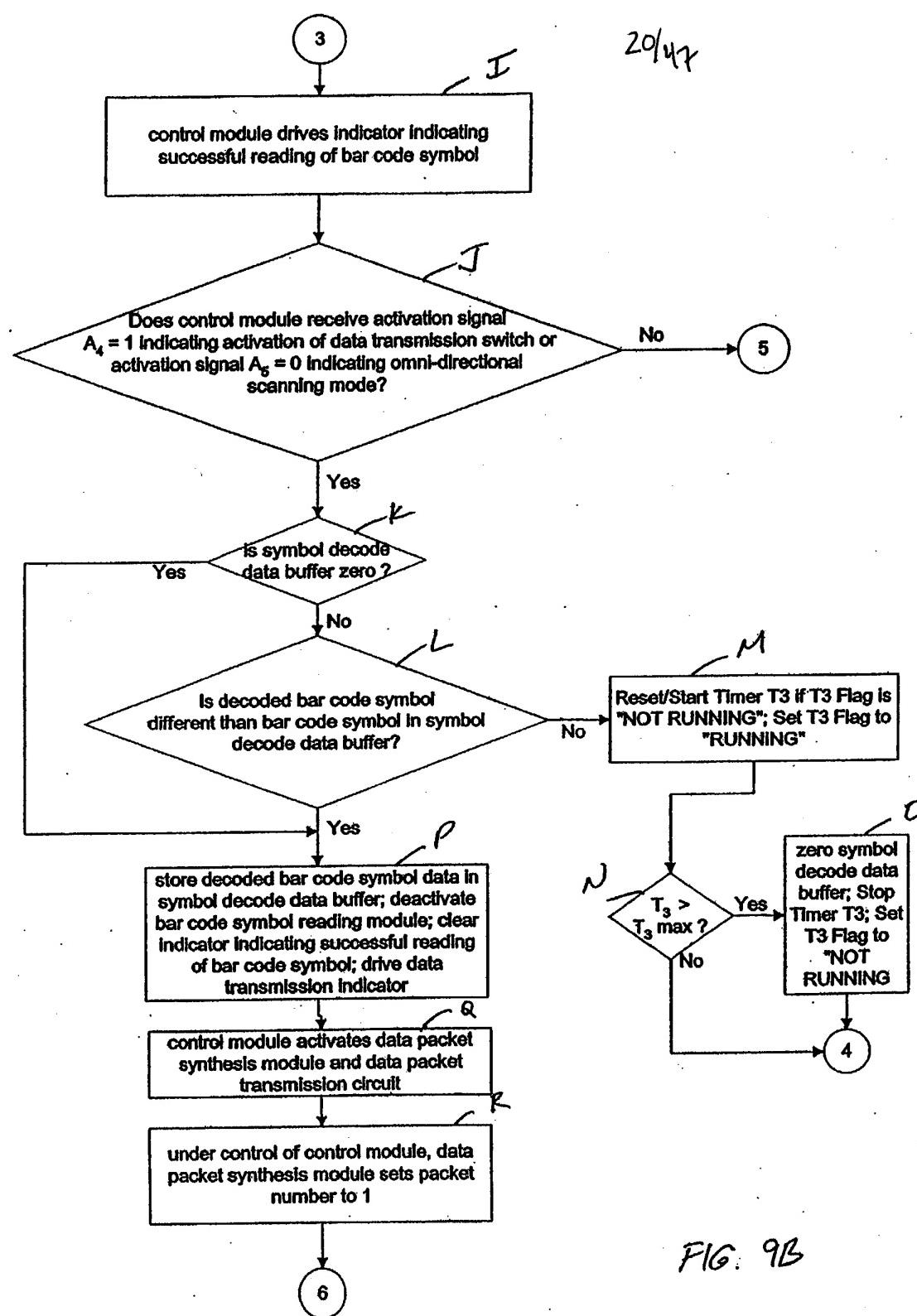


FIG. 9B

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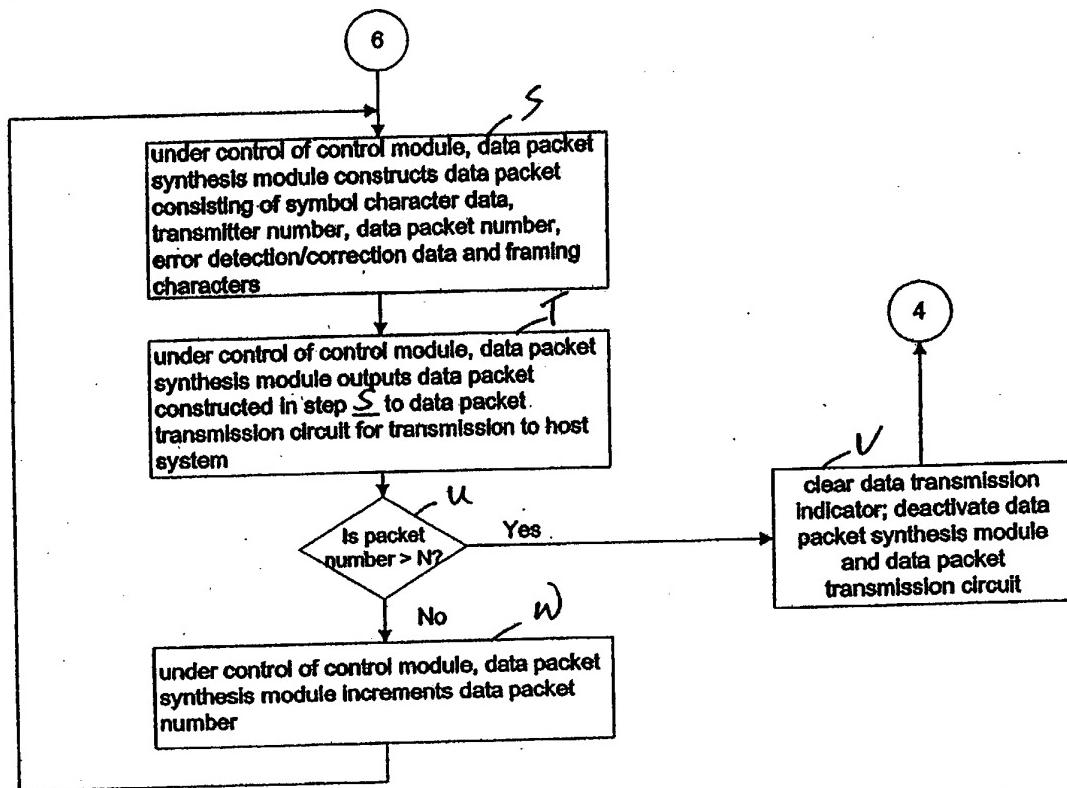


FIG. 9C

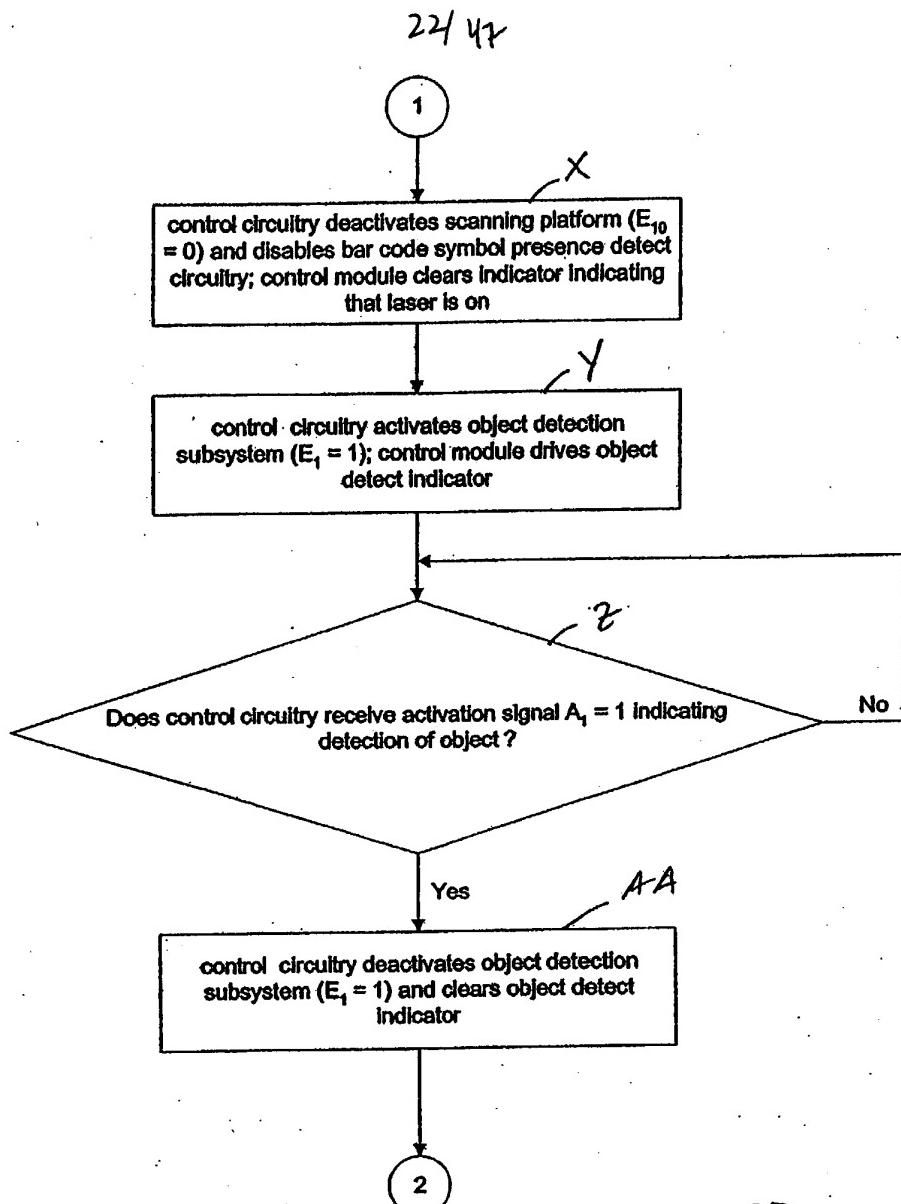


FIG. 9D

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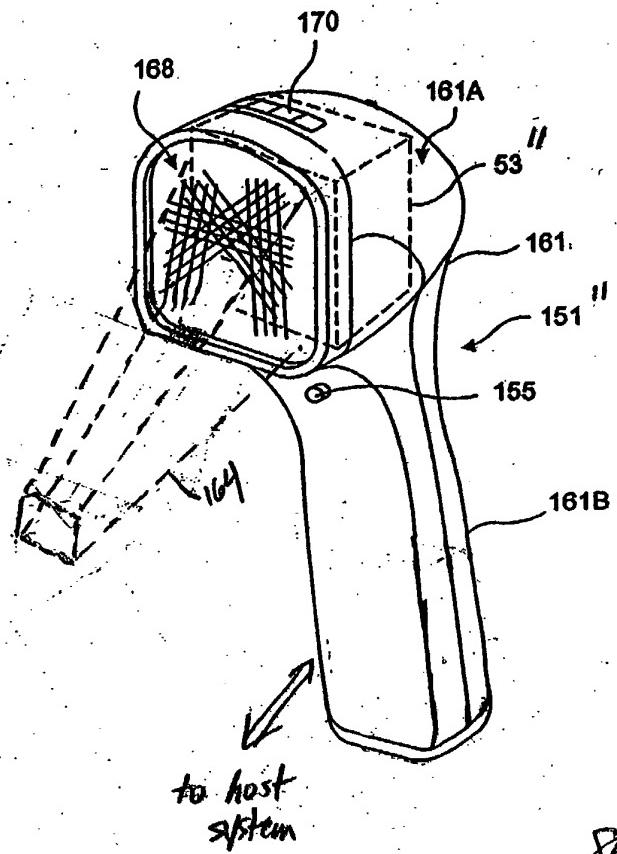


FIG. 10A

Second
Generalized
Embodiment

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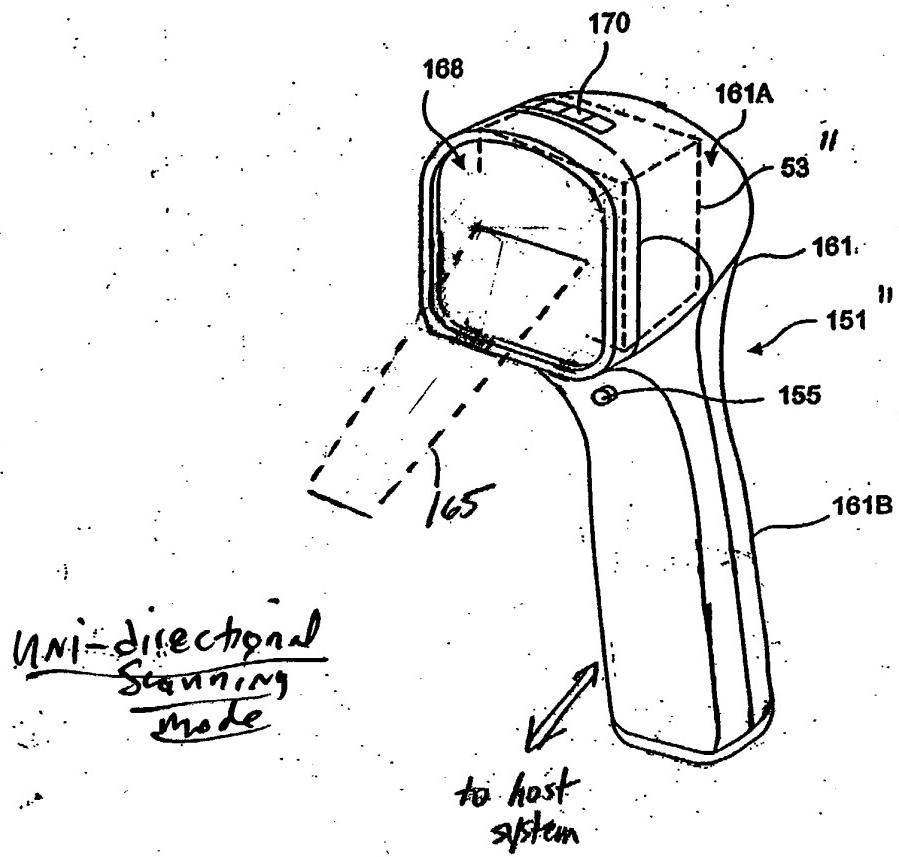


FIG. 10B

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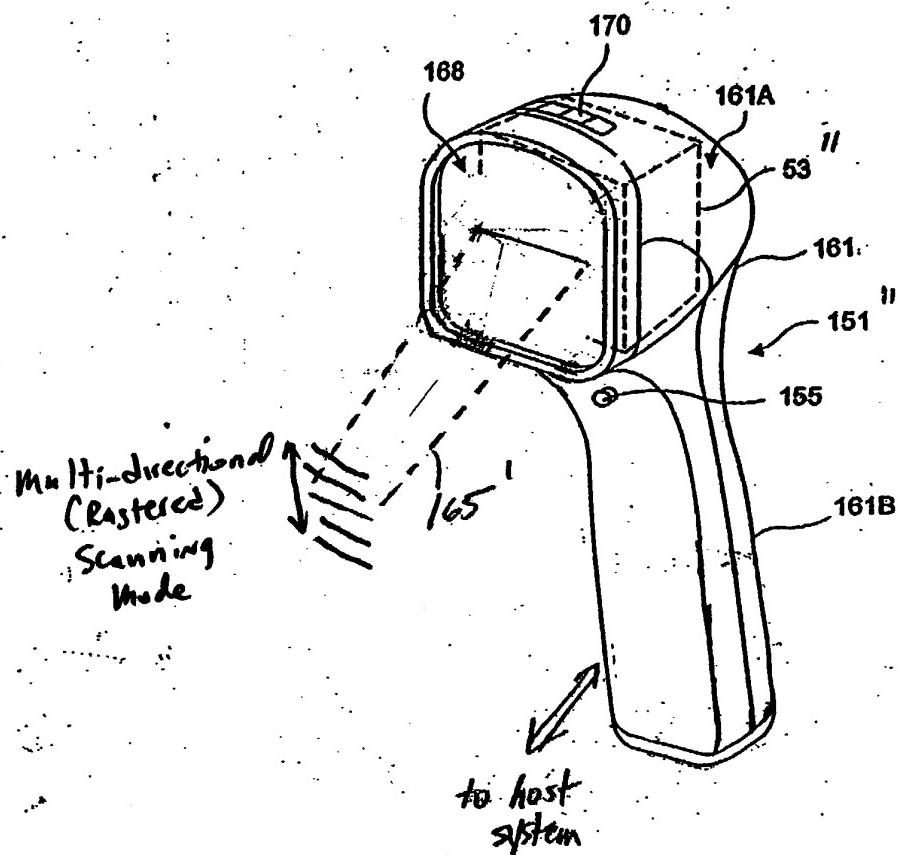


FIG. 10C

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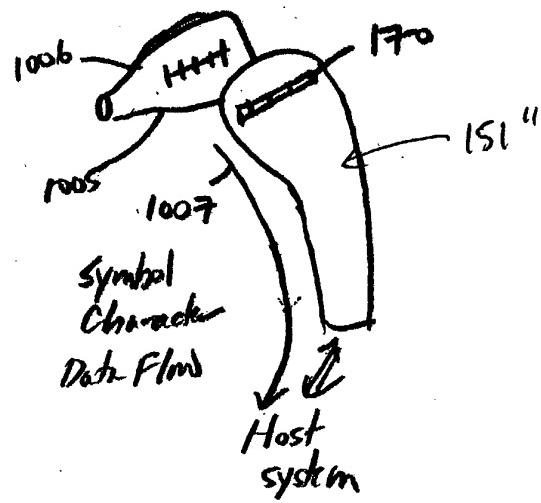


FIG. 11A

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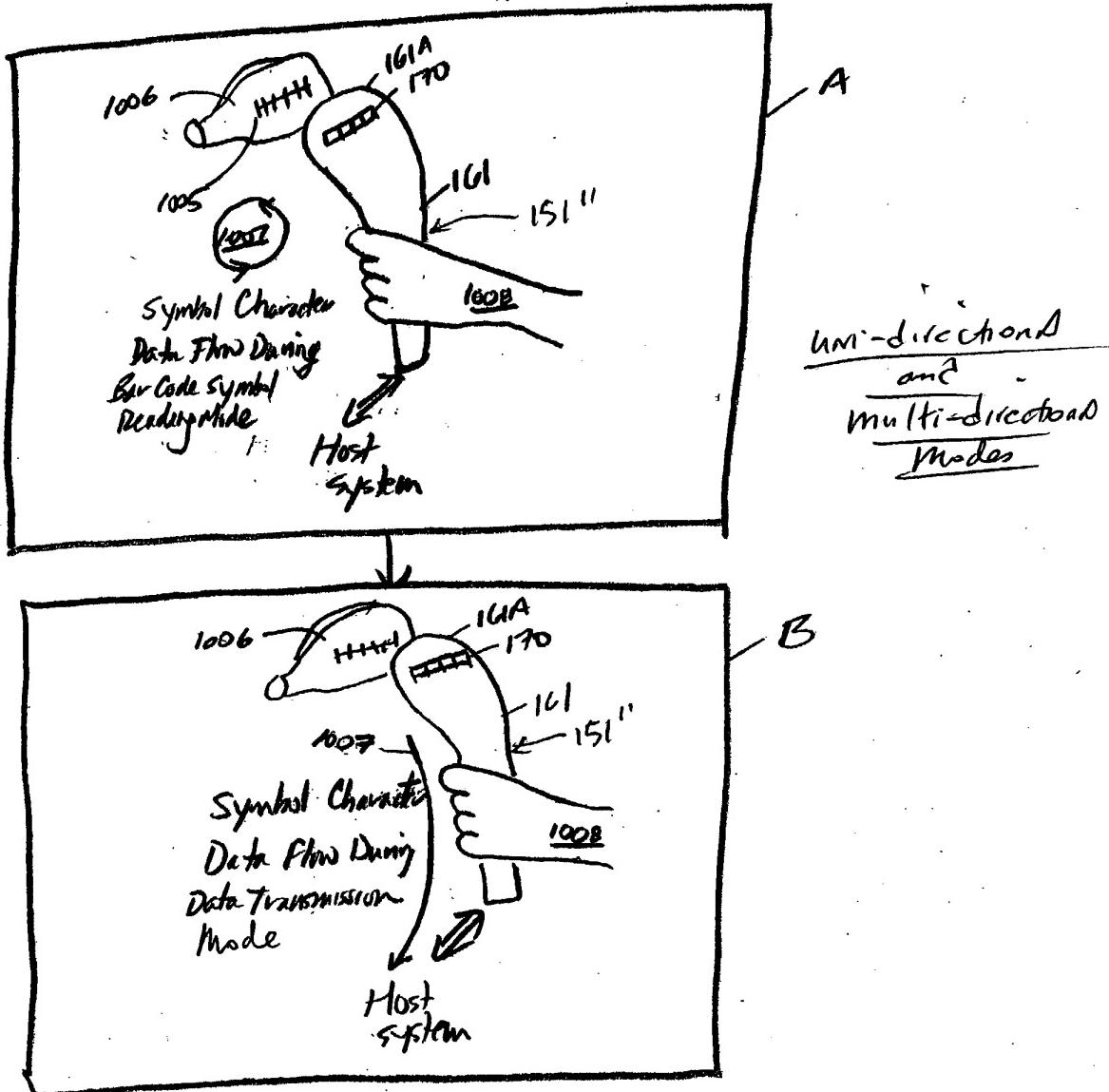
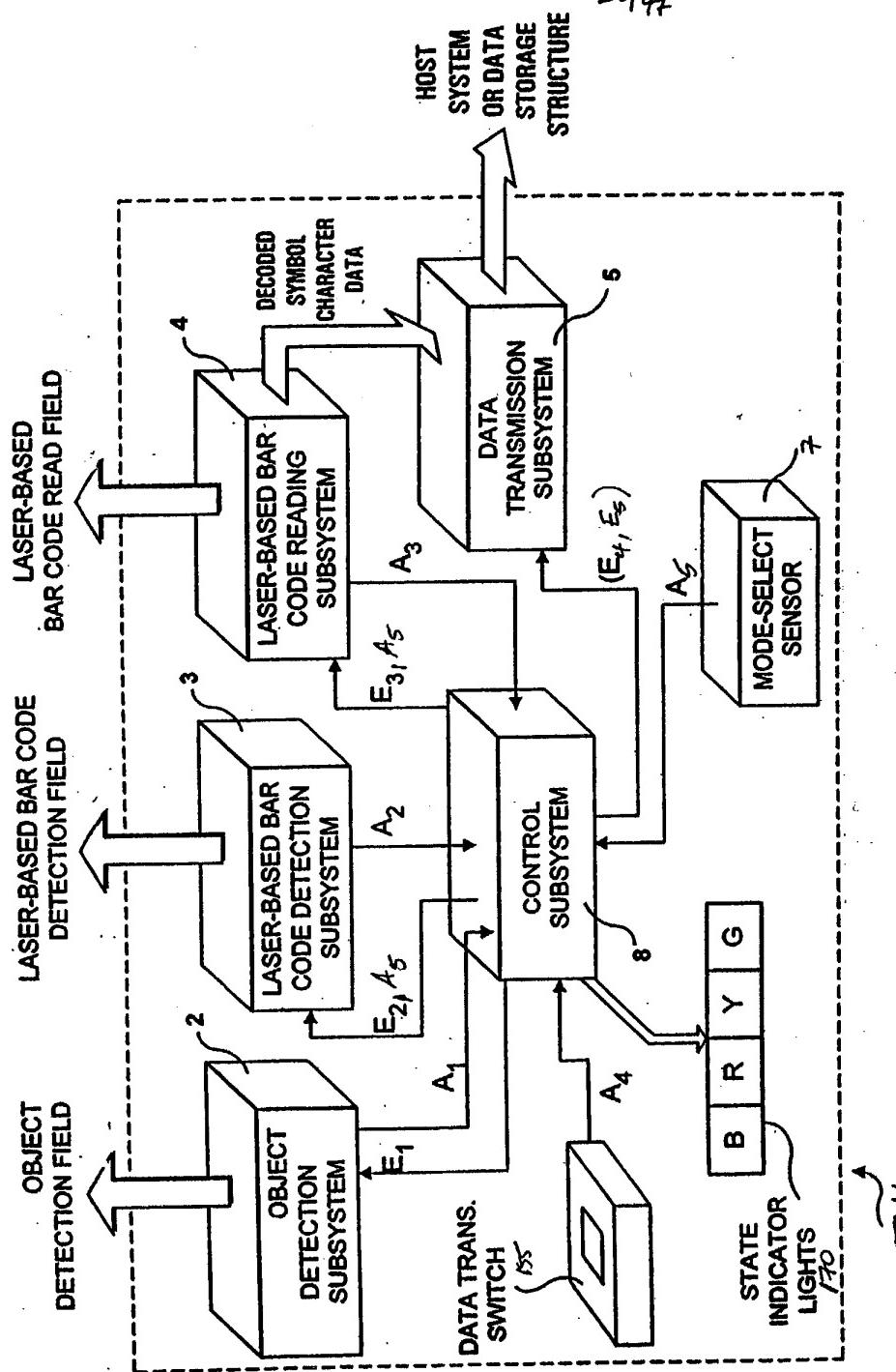


FIG. 11B



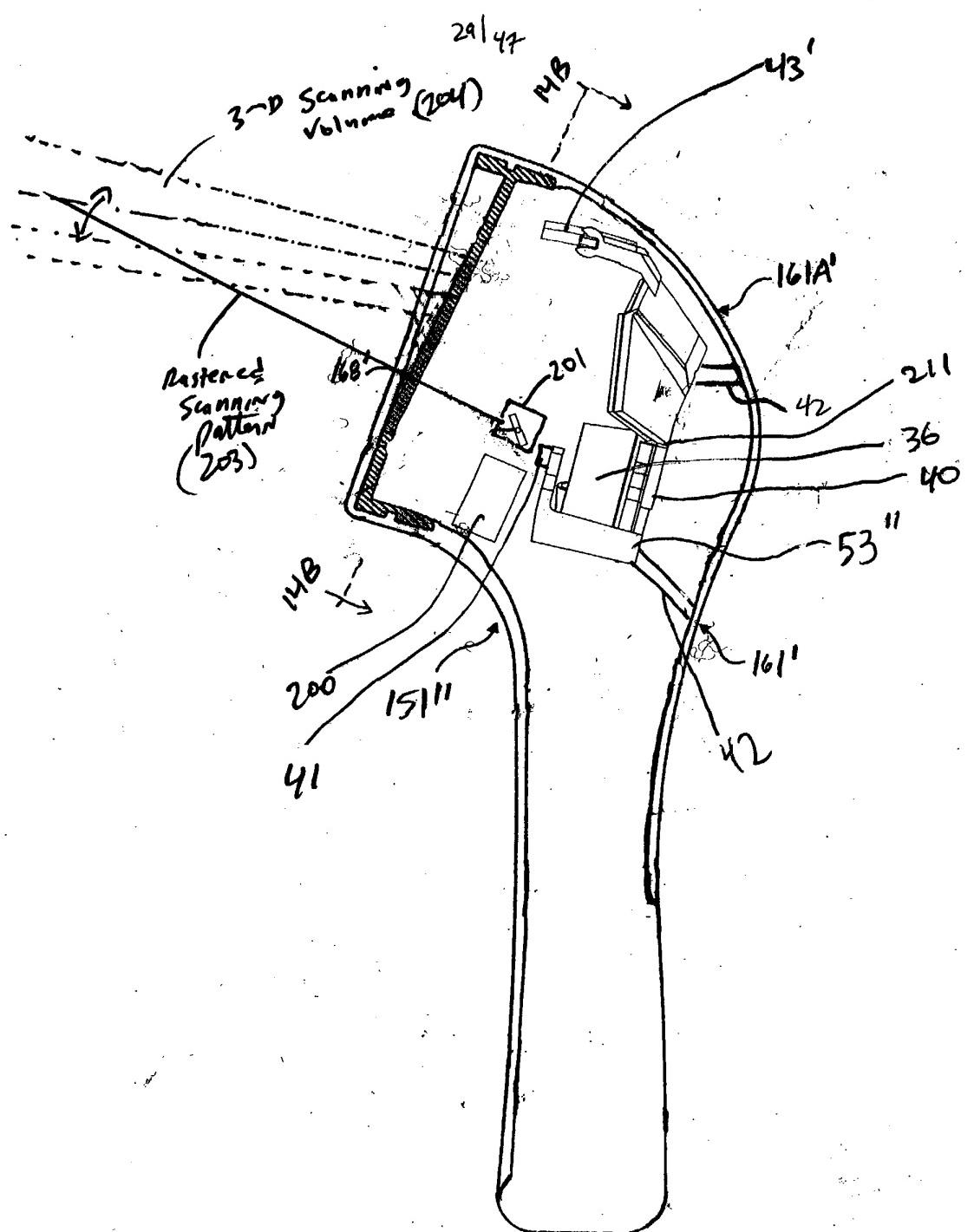


FIG. 13

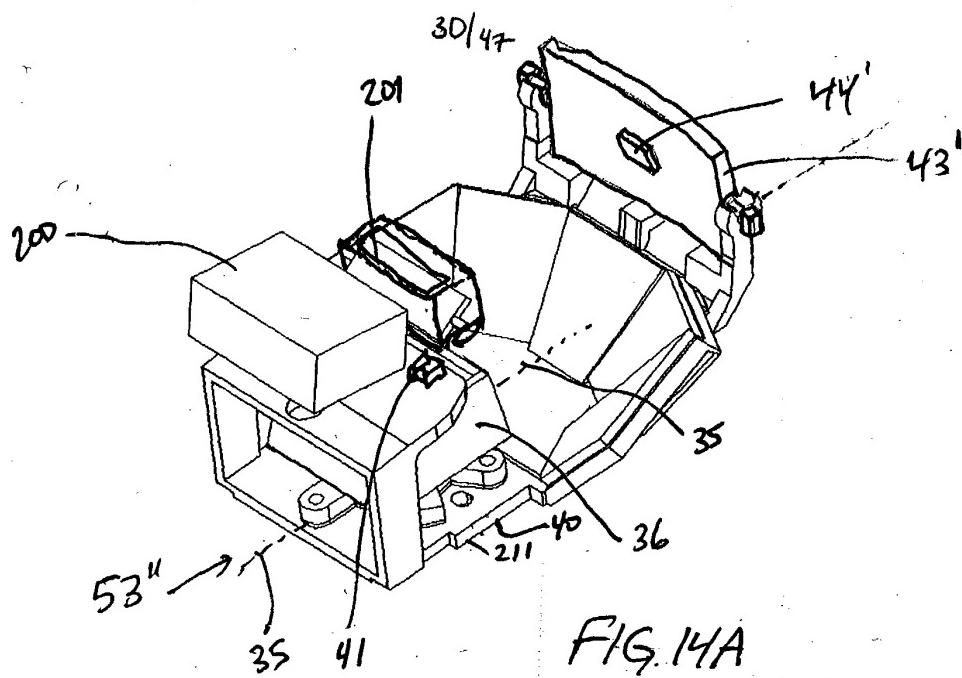


FIG. 14A

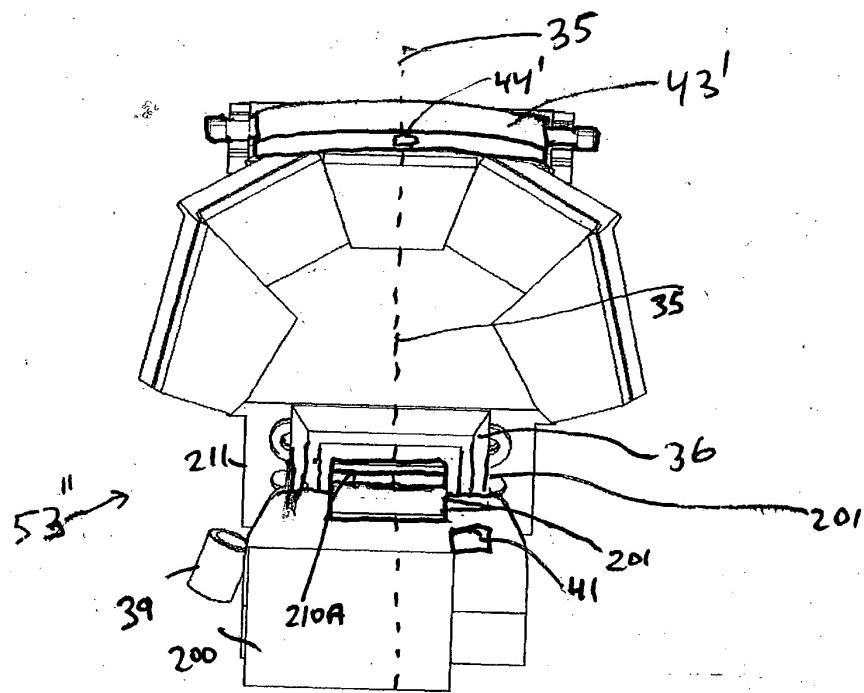


FIG. 14B

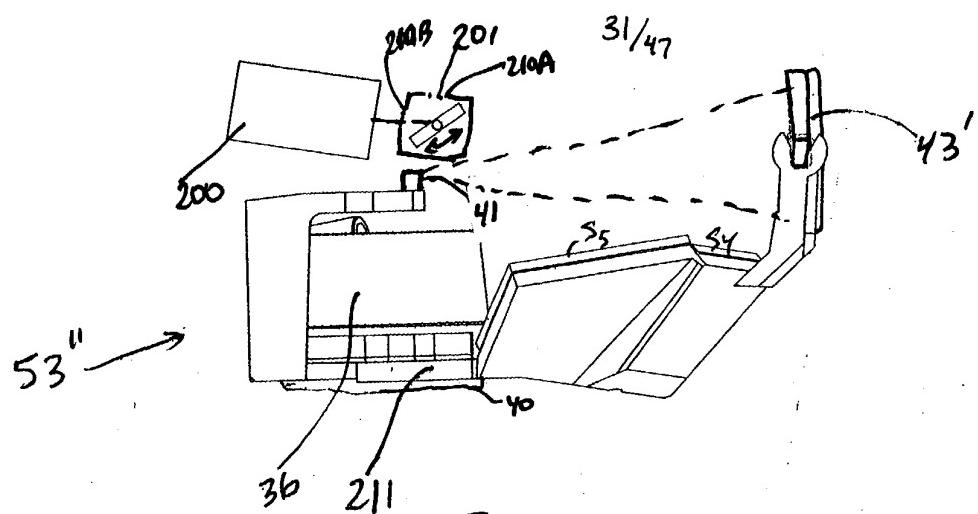


FIG. 14C

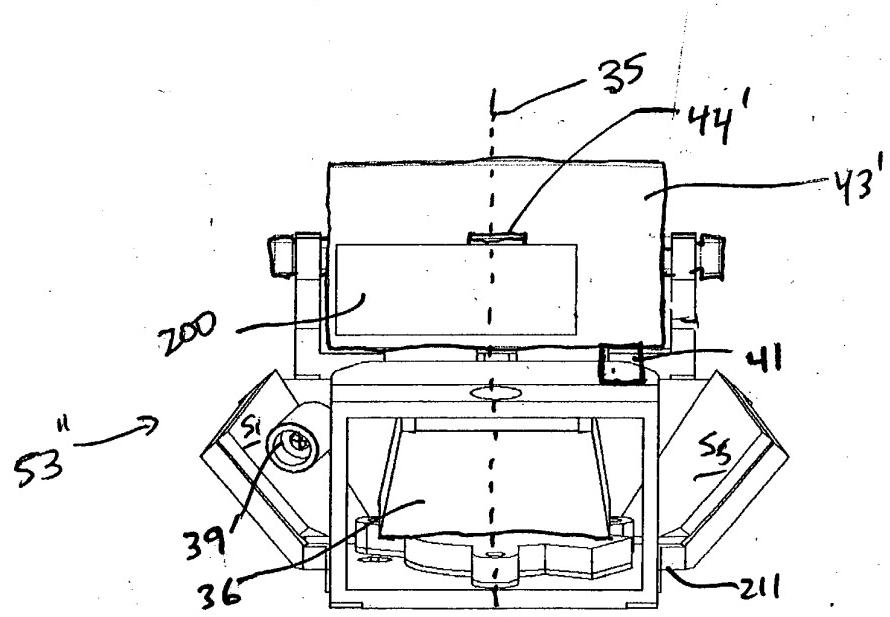


FIG. 14D

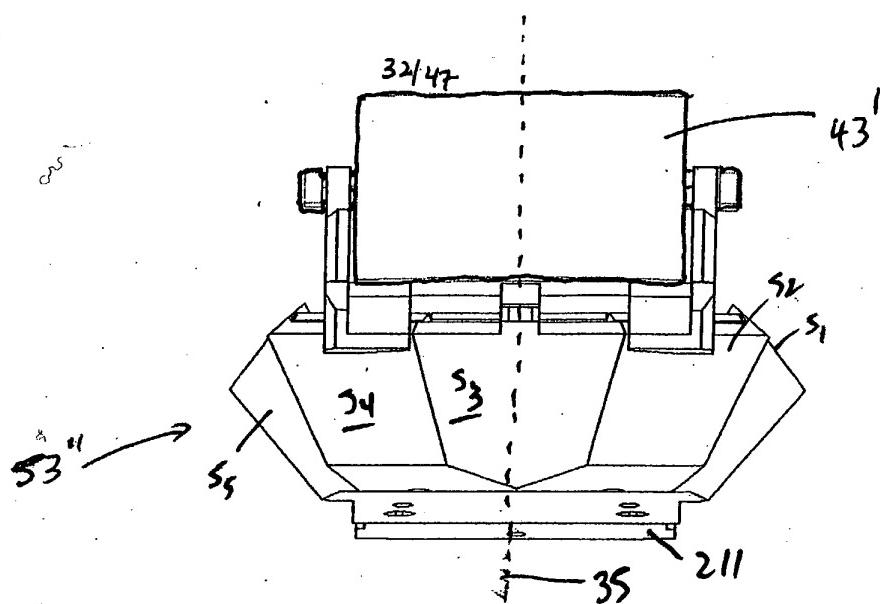


FIG. 14E

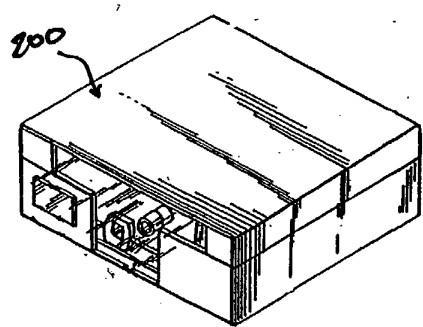


FIG. 14F

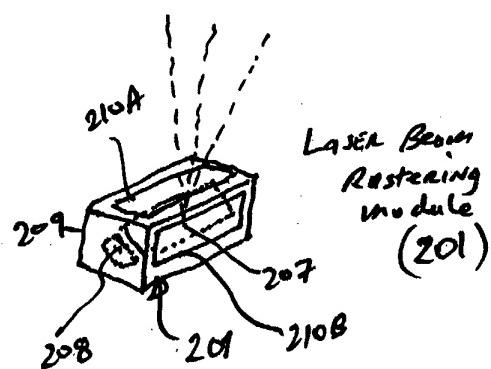


FIG. 14G

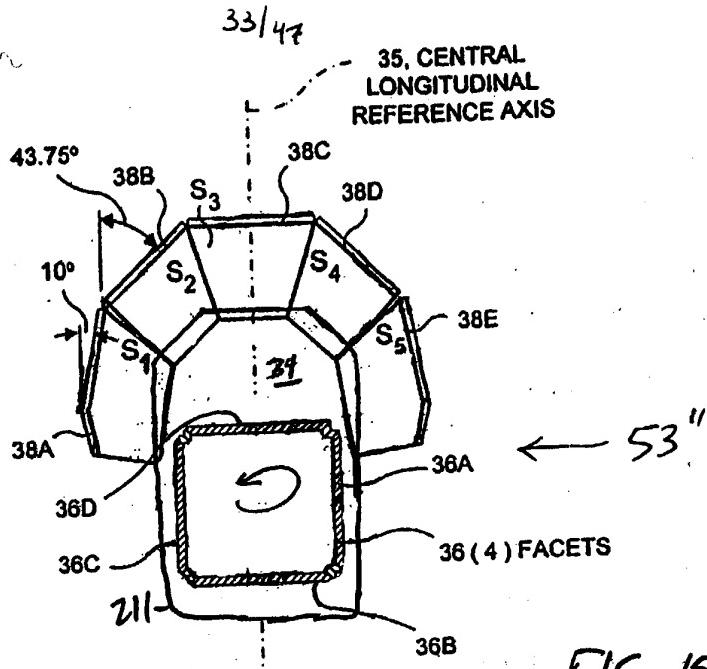


FIG. 15A

Optics Bench Array Mirror
Specifications

Mirror	Relief Angle	Twist Angle
Degrees		
1	45.91	69.32
2	47.85	34.15
3	48.4	0
4	47.85	34.15
5	45.91	69.32

Mirror	Length	Width
Millimeters		
1	19.872	17.303
2	16.341	13.746
3	16.67	15.788
4	16.341	13.746
5	19.872	17.303

FIG. 15B

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Angles Specification:

Definitions:

Relief Angle - The angle between the plane including all the bottom front edges of the array mirrors and the front surface of the mirror being measured.

Twist Angle - The angle of rotation about the z-axis with 0 degrees twist being defined as perpendicular to the incident beam (field 3).

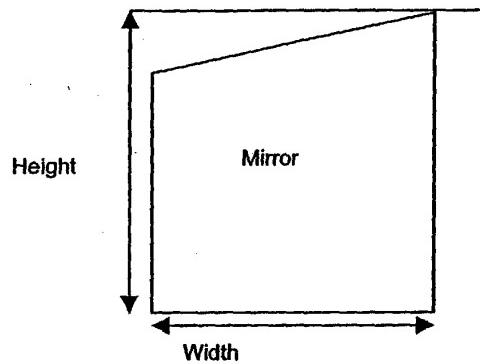


FIG. 15C

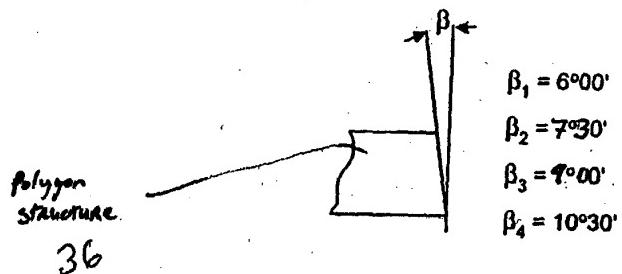
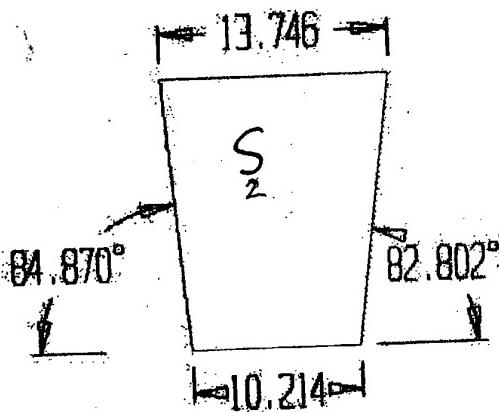
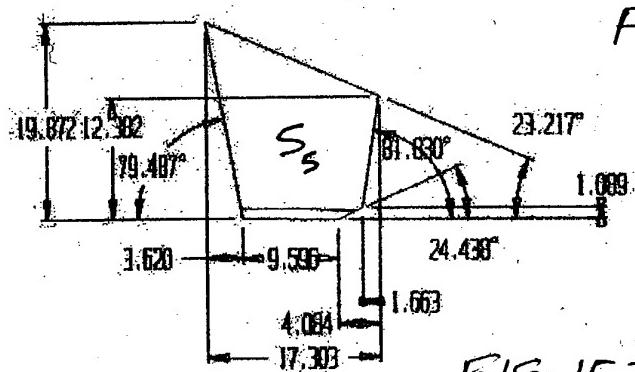
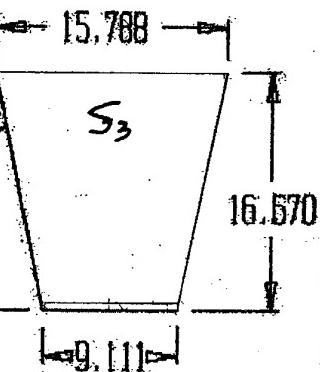
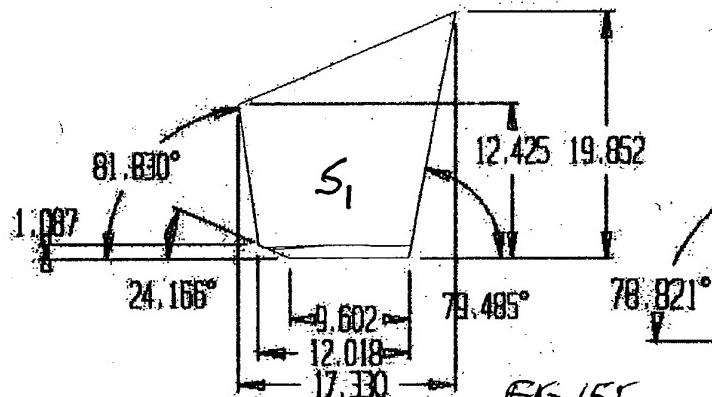
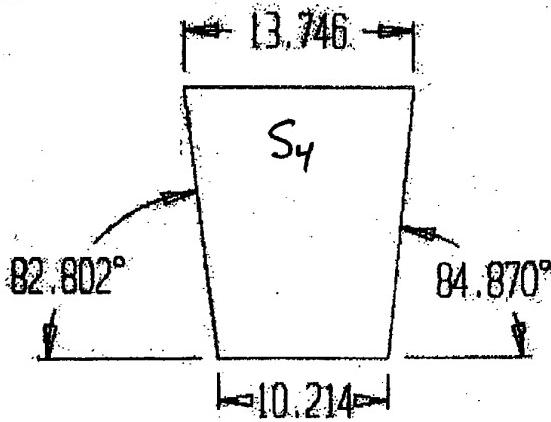


FIG. 15D



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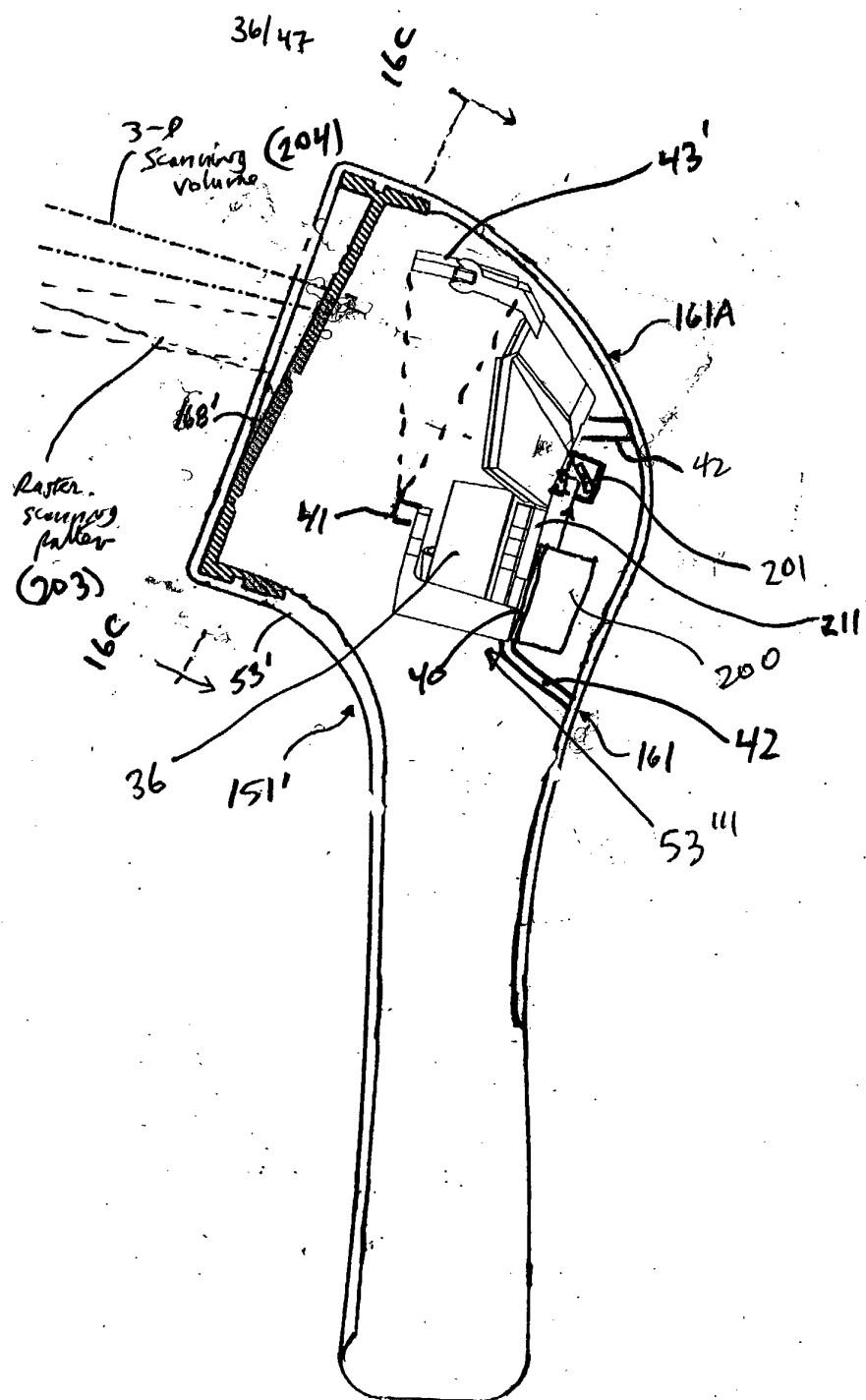


FIG. 16A

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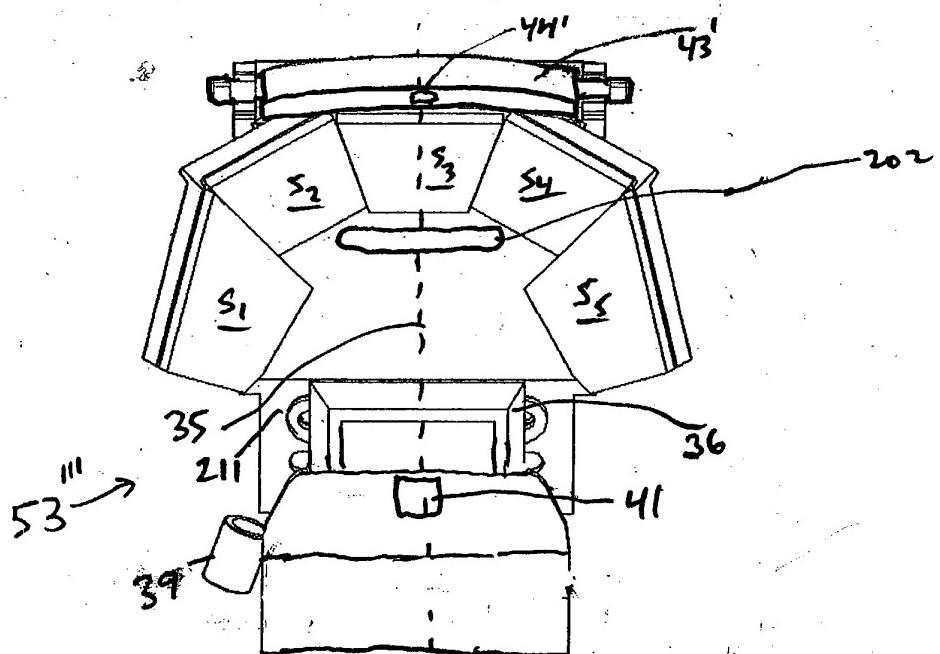
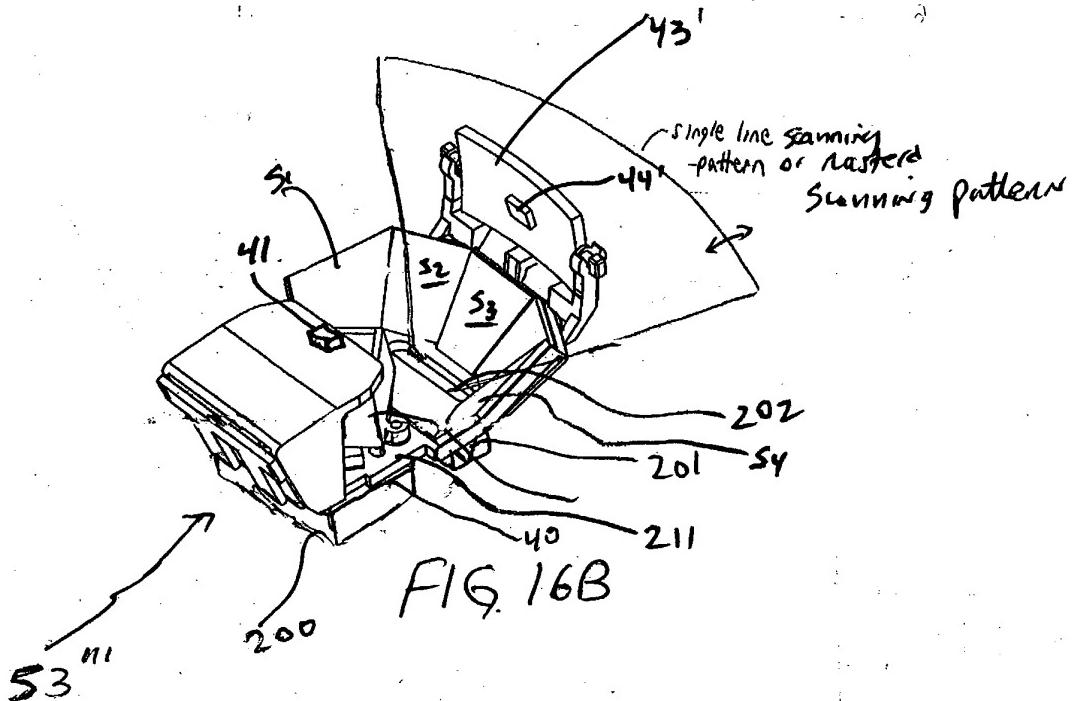


FIG. 16C

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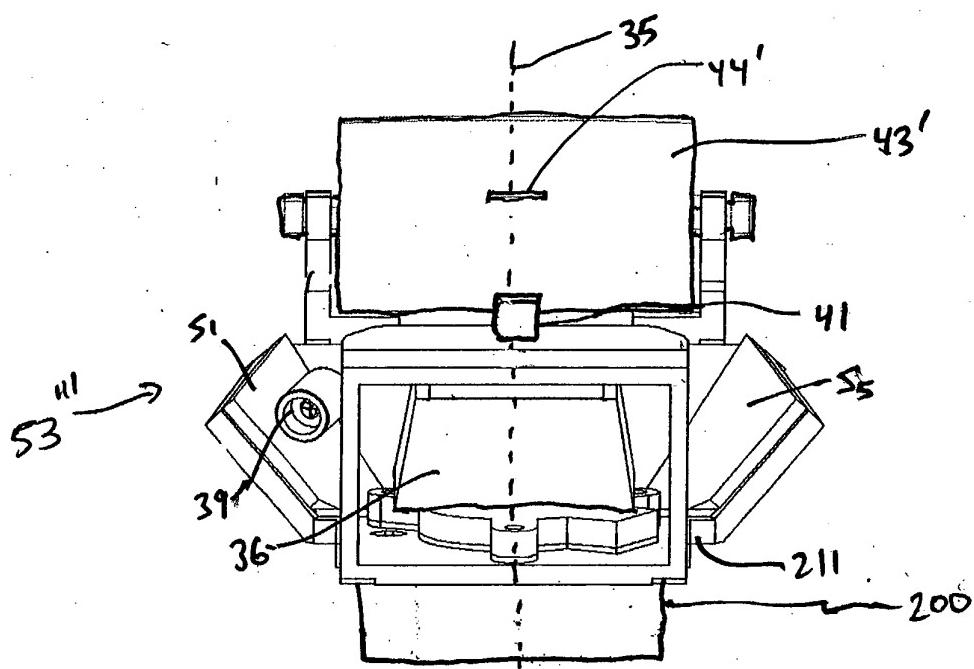
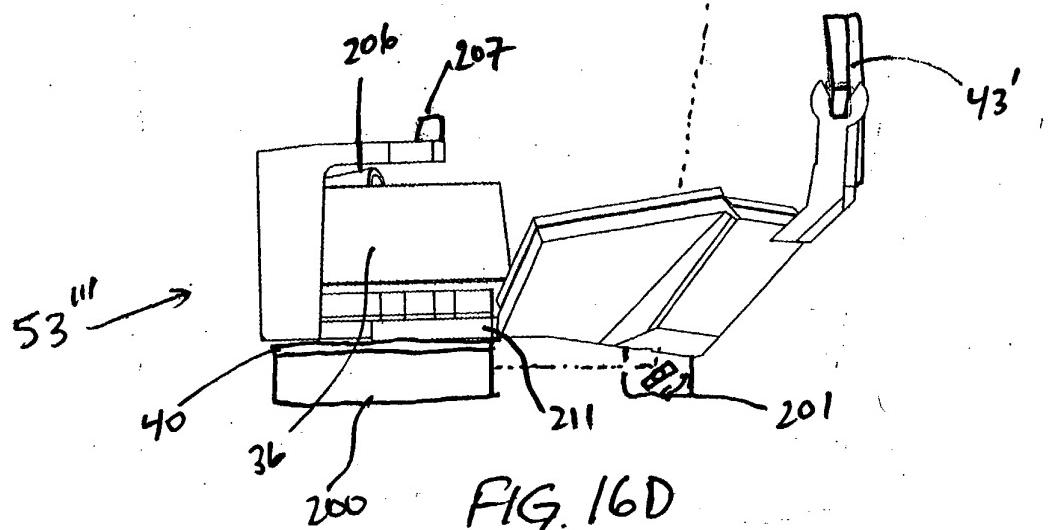


FIG. 16E

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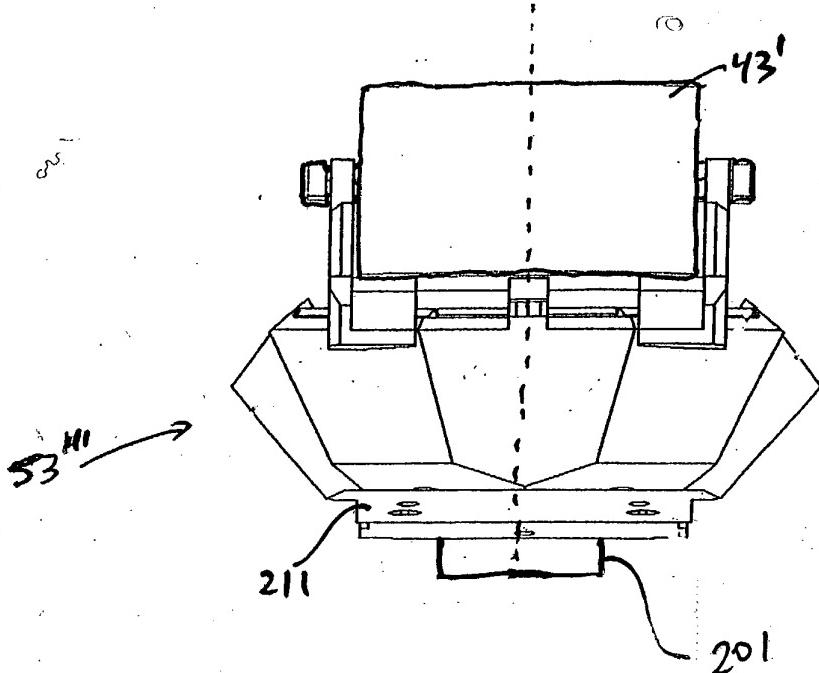


FIG. 16F

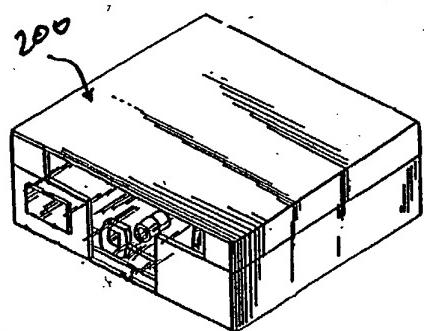


FIG 16G

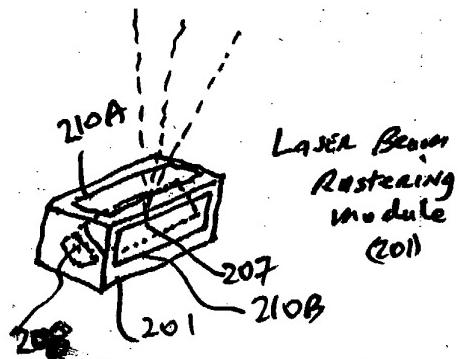


FIG 16 H

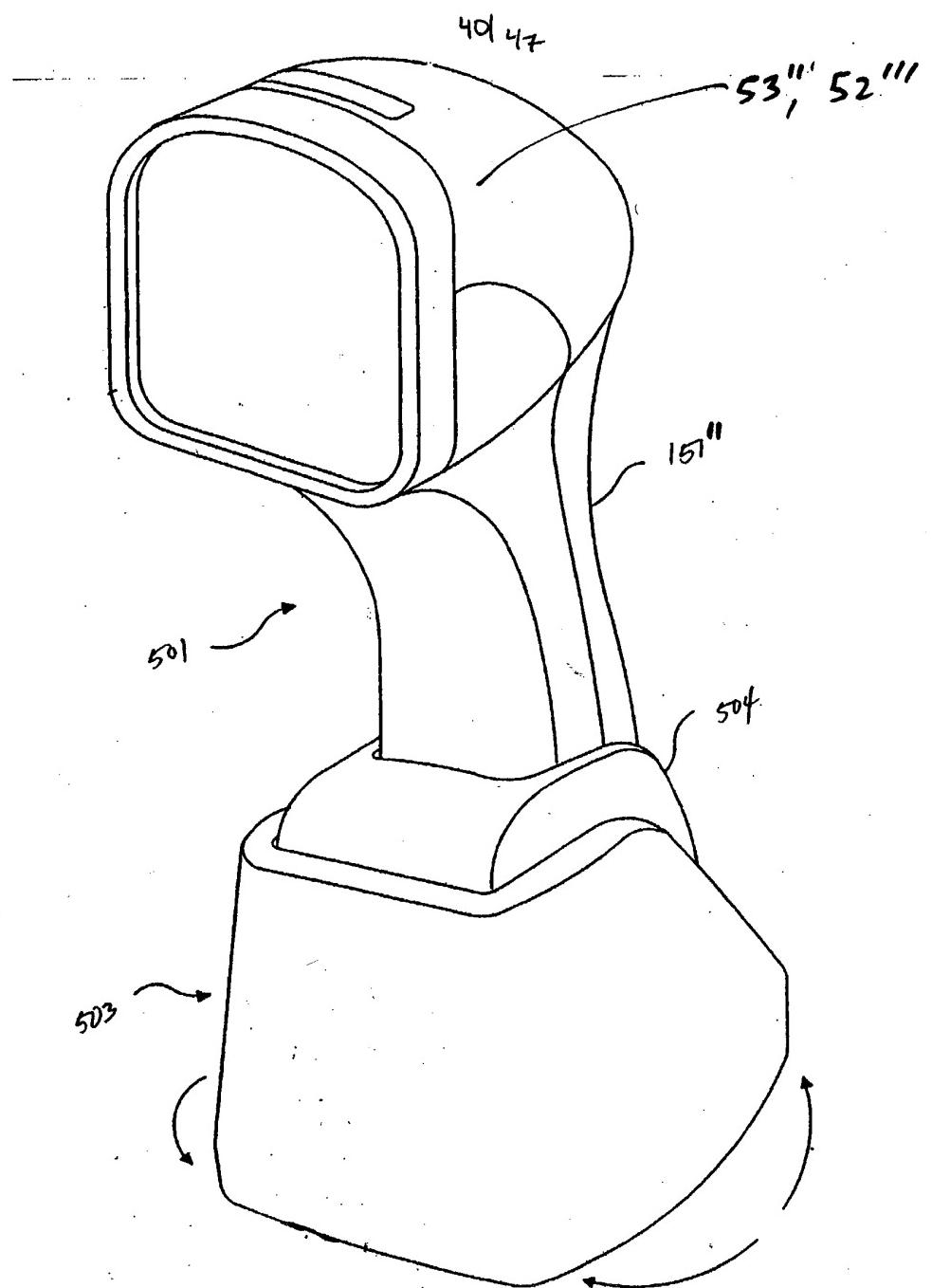
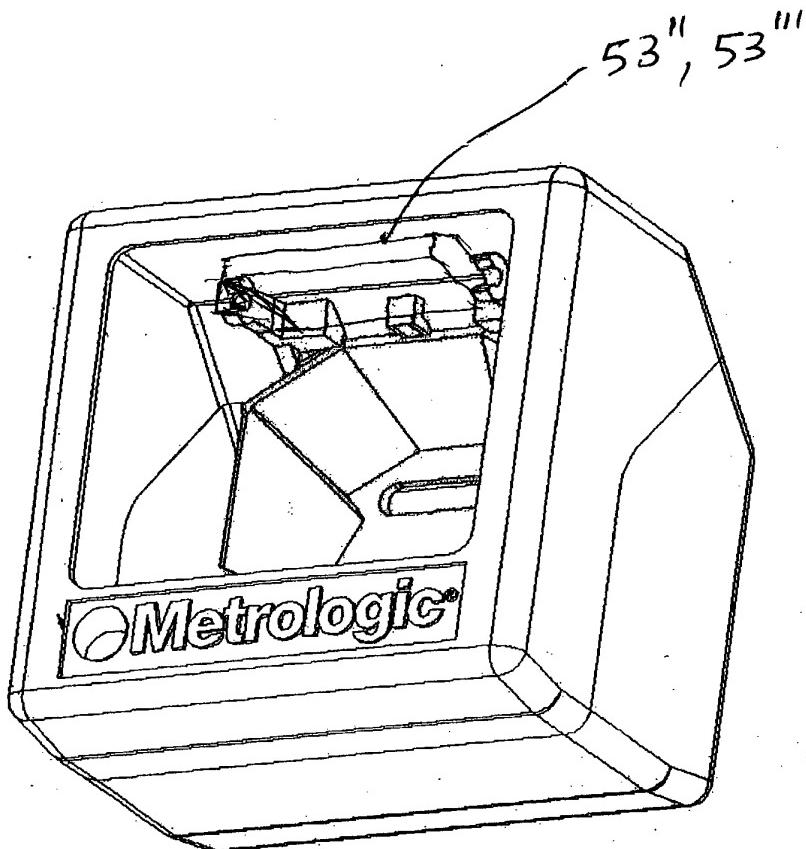


FIG. 17

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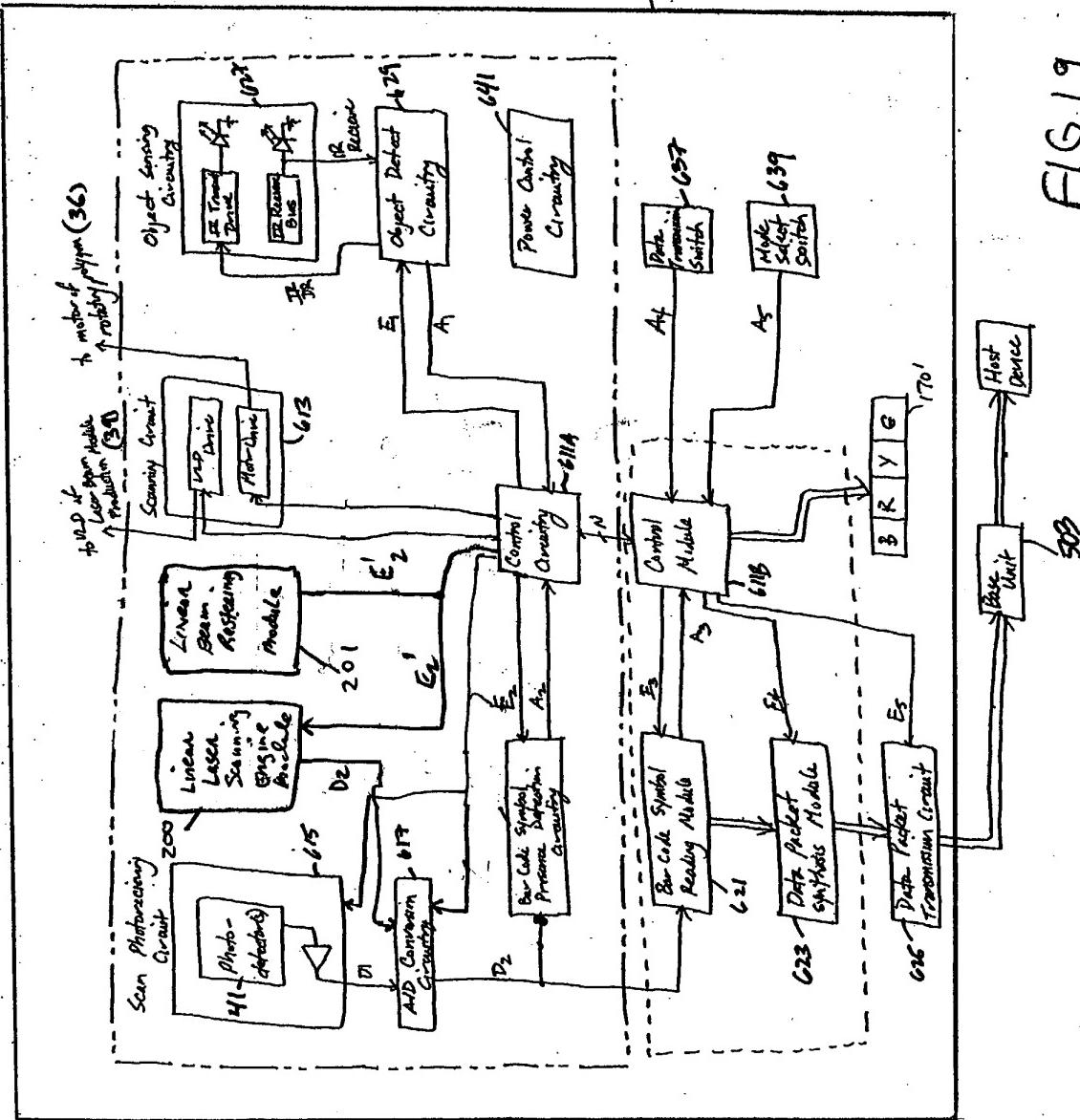
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Device has
omni-directional
Multi-directional
and uni-directional
scanning modes of
operation

FIG. 18

FIG. 19



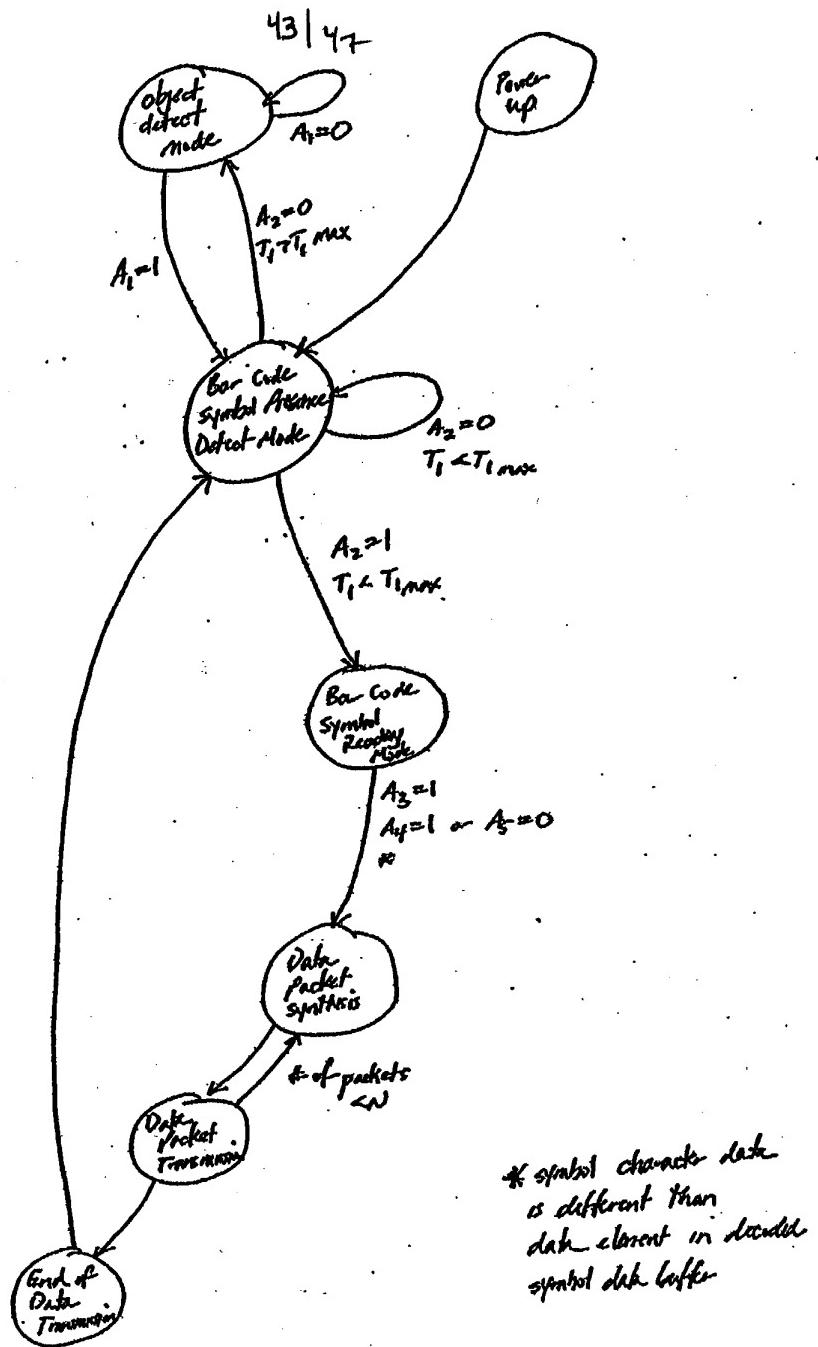


FIG 20

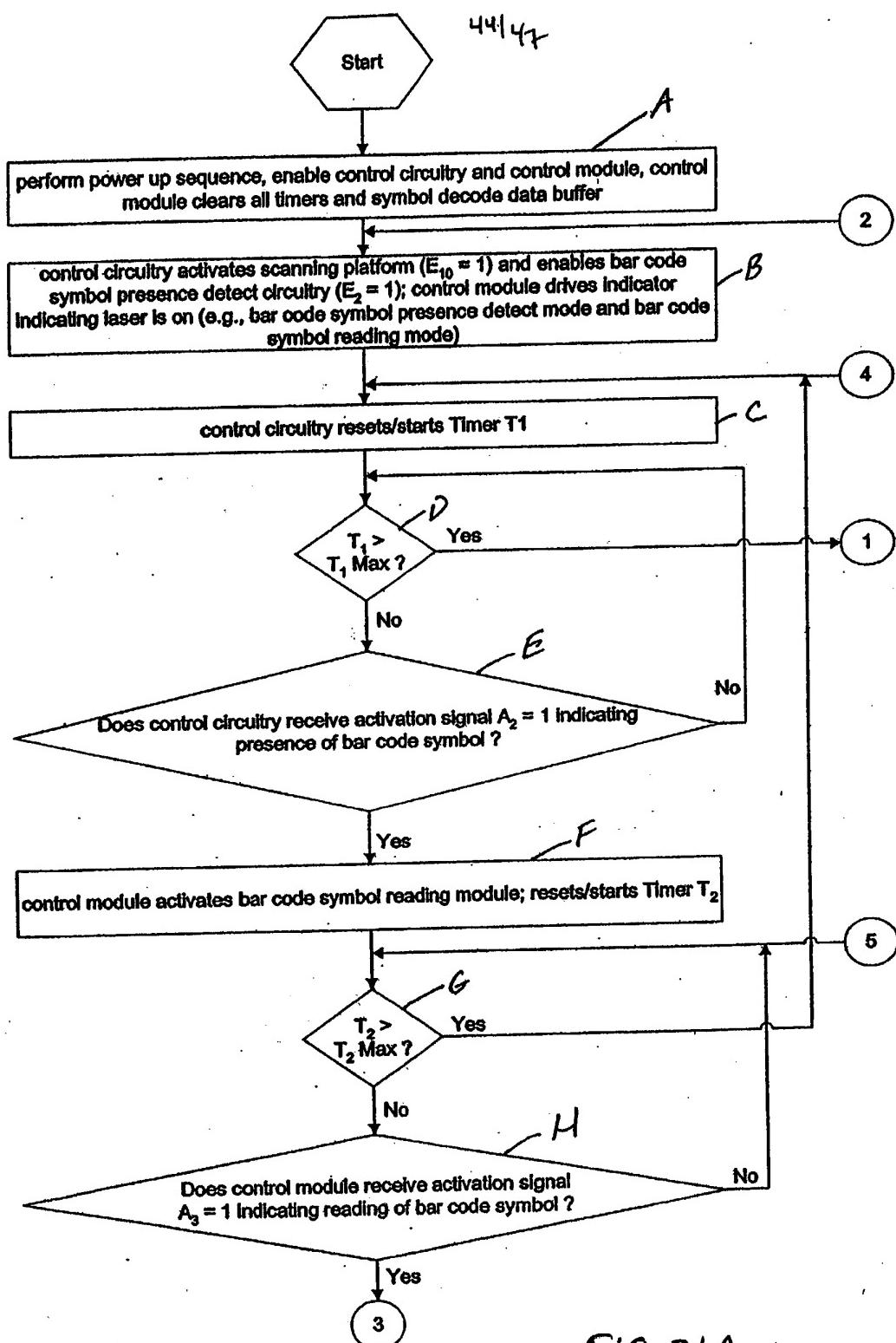
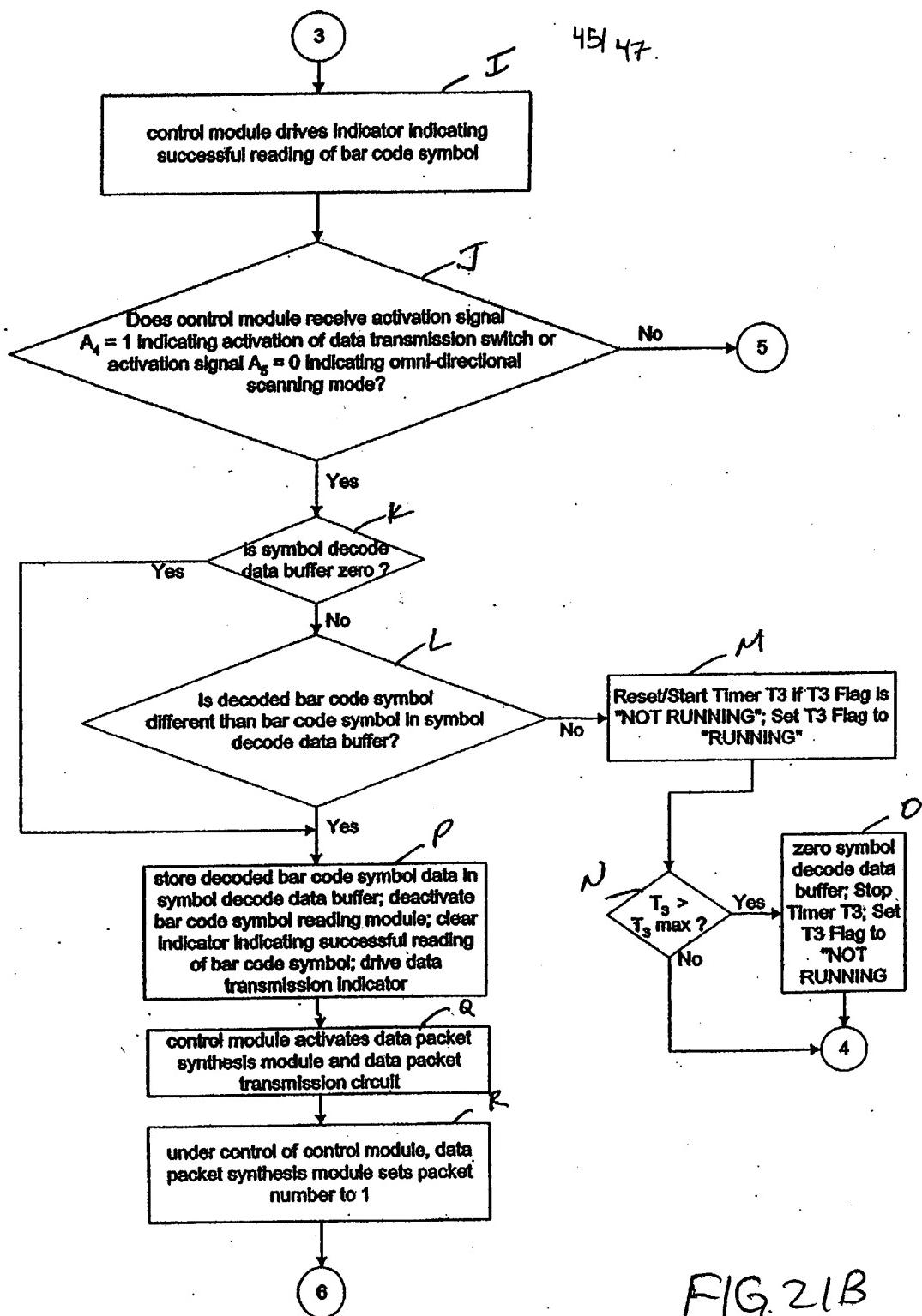


FIG. 2/A



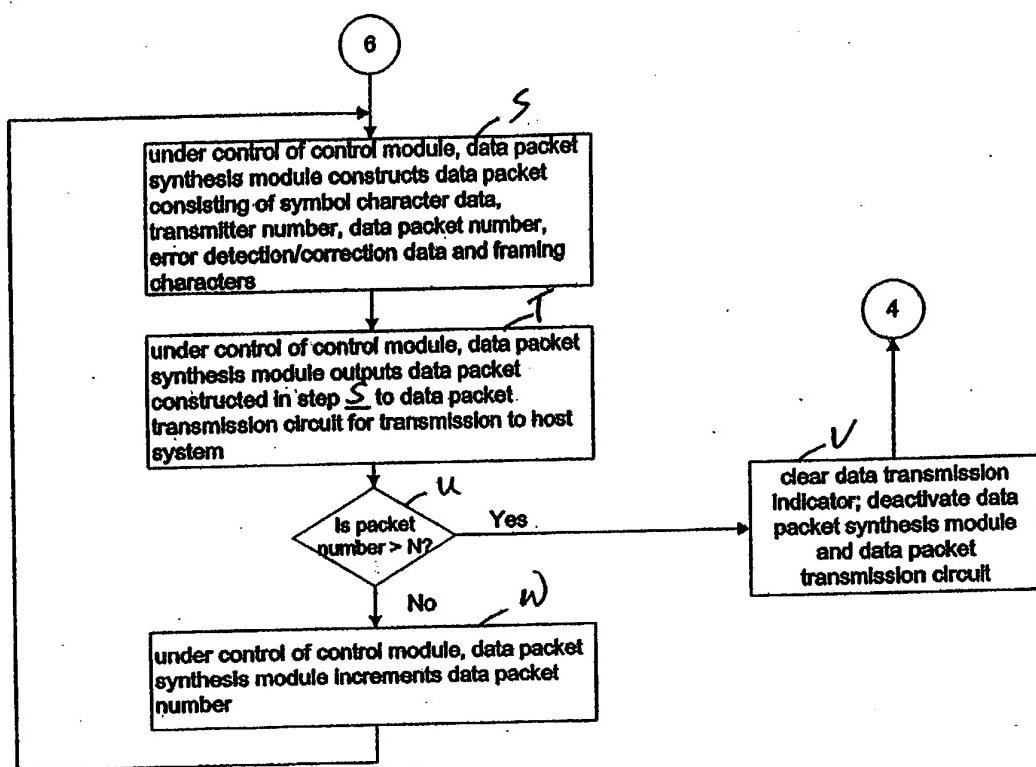


FIG.21C

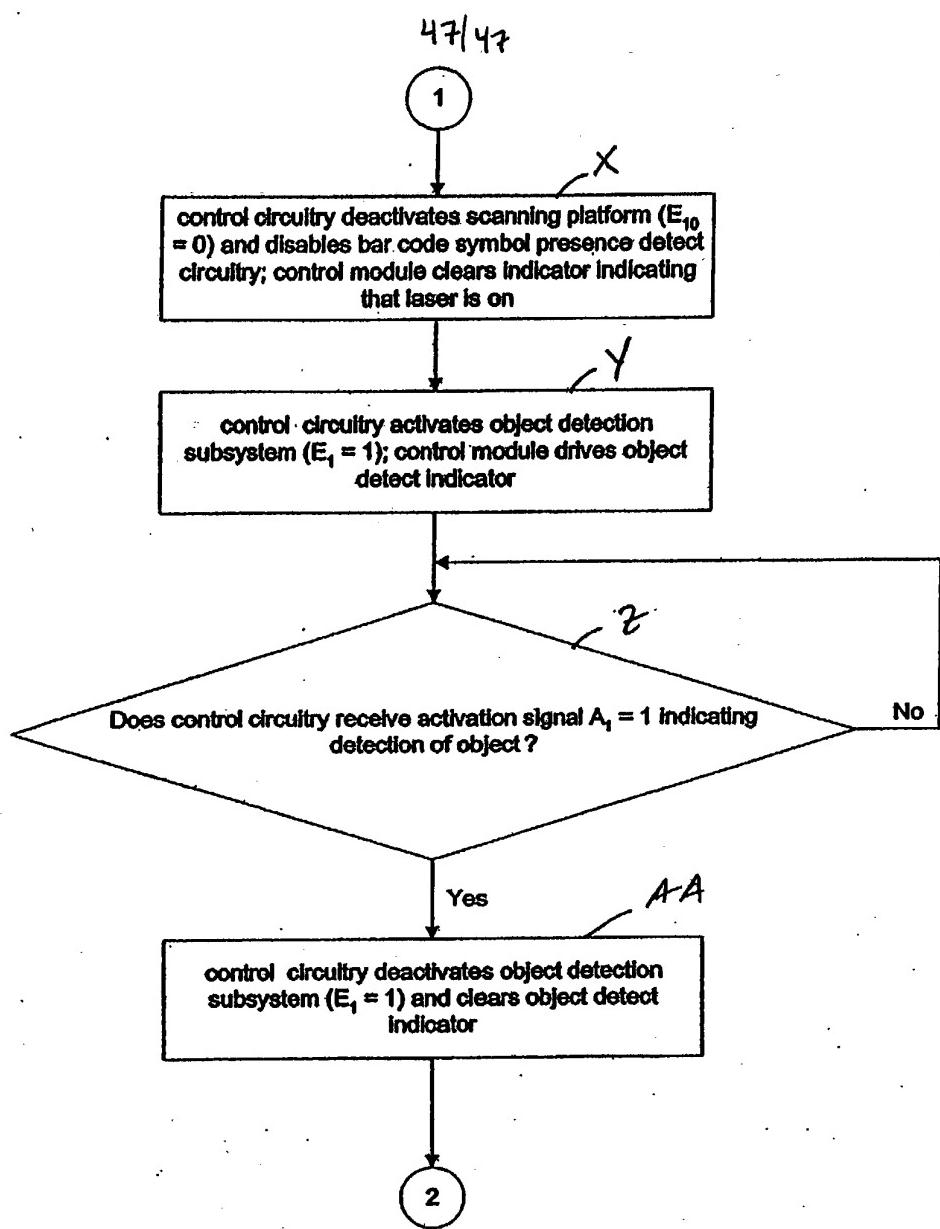


FIG Z1D